

EXHIBIT 56

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

CYNTHIA RUSSO, LISA BULLARD,
RICARDO GONZALES,
INTERNATIONAL BROTHERHOOD
OF ELECTRICAL WORKERS LOCAL
38 HEALTH AND WELFARE FUND,
INTERNATIONAL UNION OF
OPERATING ENGINEERS LOCAL 295-
295C WELFARE FUND, AND
STEAMFITTERS FUND LOCAL 439, on
Behalf of Themselves and All Others
Similarly Situated,

Plaintiffs,

v.

WALGREEN CO.,

Defendant.

Civil No.: 1:17-cv-02246

Judge Edmond E. Chang
Magistrate Judge Sheila M. Finnegan

REPORT OF KENNETH W. SCHAFERMEYER, PH.D.
November 16, 2022

[REDACTED]

Glossary of Terms

AAC	Actual Acquisition Cost
AWP	Average Wholesale Price
BIN	Bank Identification Number
CMS	Centers for Medicare and Medicaid Services
Complaint	Fourth Amended Consolidated Class Action Complaint and Jury Demand
DSS	Department of Social Services (Connecticut)
DUR	Drug Utilization Review
ESI	Express Scripts, Inc.
FEP	Federal Employees Health Benefits Program
FCA	False Claims Act
Fund Plaintiffs	Three third-party payers operating as trusts that provide healthcare benefits to their beneficiaries, specifically: IBEW; IUOE; and Steamfitters (each defined below)
GAO	Government Accountability Office
HHS	U.S. Department of Health and Human Services
HIPAA	Health Insurance Portability and Accountability Act
Humana	Humana Health Plan, Inc.
IBEW	International Brotherhood of Electrical Workers Local 38 Health and Welfare Fund
Individual Plaintiffs	Lisa Bullard, Ricardo Gonzales, and Cynthia Russo
IUOE	International Union of Operating Engineers Local 295-295c Welfare Fund
MAC	Maximum Allowable Cost
MFPC	Missouri Foundation for Pharmaceutical Care

NCPDP	National Council for Prescription Drug Programs
NDC	National Drug Code
OAR	Oregon Administrative Regulation
PBM	Pharmacy Benefit Manager
PPA	Participating Pharmacy Agreement
PSAO	Pharmacy Services Administrative Organization
PSC	Prescription Savings Club
RCSA	Regulations of Connecticut State Agencies
Rite Aid	Rite Aid Co.
Steamfitters	Steamfitters Fund Local 439
TPP	Third-Party Payer
TrOOP	True Out-of-Pocket (Expense)
U&C	Usual and Customary
WAC	Wholesale Acquisition Cost
Walgreens	Defendant Walgreen Co.

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I. INTRODUCTION

1. I am a Professor Emeritus of Pharmacy Administration at the University of Health Sciences and Pharmacy in St. Louis, Missouri, formerly the St. Louis College of Pharmacy. In a previous role at the University, I served as the Director of Graduate Studies and headed a master's degree program in Managed Care Pharmacy. I hold M.S. and Ph.D. degrees in pharmacy administration and earned graduate credits in business specializing in health economics and health systems management.

2. Since my licensure as a pharmacist in 1976, I have worked with, taught about, and analyzed the operations of pharmacies, their financial performance, their costs of dispensing, and their reimbursement by private and public prescription programs, including government-supported health care programs such as Medicare, Medicaid, TRICARE, and the FEP.

3. I have taught master's-level courses in managed health care and managed care pharmacy, dealing with healthcare policy issues such as Medicare, Medicaid, managed care organizations, and PBMs. Students enrolled in the program were mostly pharmacists working in middle-management positions for managed care organizations, pharmaceutical manufacturers, and government agencies.

4. I was the Director of Professional Relations for the MFPC, a PSAO, starting in 1976. To the best of my knowledge, I was the first pharmacist in the United States working full time for a PSAO. MFPC was one of the organizations involved with the work group that created the NCPDP in the mid-1970s. I am quite familiar with the work that went into adopting the first Universal Claim Form as well as the industry understanding of the term "usual and customary price" at that time and ever since.

5. I have represented pharmacists for nine years as a lobbyist in Virginia and Kansas, and was intimately involved with public policy issues affecting health care, especially state Medicaid programs. I also served as Executive Director of the Kansas Pharmacy Service Corporation in the mid-1980s, an organization that managed the Kansas Pharmacy Network – a PSAO that facilitated employer group contracting for prescription benefits, including claims processing.

6. I have also worked in an advisory role for PBMs and state Medicaid programs in Indiana and Missouri, including service as Chair of the Missouri Medicaid Prior Authorization Task Force. I also participated in numerous research projects involving Medicaid prescription reimbursement issues.

7. I have authored, co-authored, or edited more than 30 books and manuals, including multiple editions of *Healthcare Delivery: A Primer for Pharmacists*. I have also authored chapters in eight other textbooks, mostly covering financial, economic, and systems management issues related to managed care, Medicare, and Medicaid.

8. I have been designated as a Fellow of the Academy of Managed Care Pharmacy, an 8,000+ member organization that has designated only 37 individuals as fellows. I am also a Fellow of the American Pharmacists Association.

9. Through my education and experience, I have personal knowledge of the practices of PBMs, state and federal healthcare programs, third-party insurance payers, and pharmacies as they relate to the purchasing, pricing, dispensing, and reimbursement of prescription drugs. My

curriculum vitae is attached as **Exhibit A** and contains a list of all publications I have authored in the last ten years and the cases in which I have testified within the last four years.

10. My report is based on my knowledge of the industry, professional experience, and review of relevant industry publications, statutes, regulations, federal and state regulatory guidance, relevant case law, and pleadings, as well as documents from the evidentiary record in this lawsuit, including deposition transcripts and exhibits, which have been provided to me by Plaintiffs' counsel. A list of the materials I considered in forming my opinions is attached as **Exhibit B**.

11. I am compensated at the rate of \$600 per hour for research, review, preparation, and testimony. My compensation is not dependent upon rendering any particular opinion.

12. I reserve the right to amend or update my opinions based on any information that may become available to me or known by me in the future.

II. ASSIGNMENT

13. Plaintiffs in this case include: (1) Individual Plaintiffs, who are individual consumers who are beneficiaries¹ of both private commercial health insurance benefit plans that provide prescription drug benefits and Medicare Part D; and (2) Fund Plaintiffs, three TPPs² operating as trusts that provide healthcare benefits to their beneficiaries that maintain employee health and welfare plans and "employee benefit plans" pursuant to Section 302(c)(5) of the Labor Management Relations Act, specifically: IBEW; IUOE; and Steamfitters.

14. Walgreens is a large pharmacy chain operating over 8,000 retail pharmacies in all 50 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.

15. Plaintiffs in this case allege that Walgreens operated retail pharmacies and, in so doing, perpetrated a "scheme to artificially inflate 'usual and customary' prices reported and used to charge Plaintiffs and members of the Class for purchases of certain generic prescription drugs at Walgreens."³ Specifically, Plaintiffs allege Walgreens contrived a sham discount prescription drug program, the PSC, precisely for this purpose.⁴ This conduct allegedly started in 2007 and continues today.⁵

16. I understand that Plaintiffs seek to represent a class consisting of:

All persons, or entities, for whom prescription drug insurance benefits were provided through the Relevant PBMs (a.k.a., A&A Services, LLC d/b/a SAV-RX

¹ Beneficiaries are also commonly referred to as "members."

² In this report, the term TPP shall have the same meaning as specified in the Complaint: it "refers to any private health insurance companies, third-party administrators, health maintenance organizations, health and welfare plans that make payments from their own funds, and other health benefit providers and entities with self-funded plans that contract with a health insurer or administrator to administer their prescription drug benefits." *See* Complaint at 1 n.1 (ECF 477).

³ *Id.*, ¶1.

⁴ *Id.*, ¶70.

⁵ *Id.*, ¶13.

Prescription Services; Caremark, LLC; Castia Rx (f/k/a Leehar Distributors Missouri, LLC); Express Scripts, Inc.; Medco Health Solutions, Inc.; MedImpact Healthcare Systems, Inc.; MedTrak Services, LLC; and/or OptumRx, Inc.), and who paid or reimbursed, in whole or in part, for generic prescription drugs from Walgreen Co. at any point in time from the period January 1, 2007 through the present, in Arizona, California, Connecticut, Delaware, Florida, Illinois, Massachusetts, New York, North Carolina, Ohio, Pennsylvania, and Wisconsin, where the usual and customary price was a basis for the amount paid or reimbursed in connection with the purchase of such drug, and the amount paid or reimbursed was inflated because the Prescription Savings Club price was not reported or otherwise included when determining the usual and customary price to report.

17. I have been retained by Plaintiffs to provide testimony regarding the meaning of U&C in the retail pharmaceutical industry, its role in the industry, and to compare the industry's U&C pricing requirements to the reporting practices of Walgreens. I will also address the financial incentives for pharmacies and PBMs to use inflated U&C prices for third-party prescription drug claims and the adverse impact of such practices on TPPs, like Fund Plaintiffs, and insured Walgreens' customers, like Individual Plaintiffs.

III. SUMMARY OF OPINIONS

18. Opinion 1: The prescription drug claims adjudication process is common and standardized throughout the industry.

19. Opinion 2: The use of "lower of" logic is common and standard throughout the industry.

20. Opinion 3: The industry definition of U&C is common and has been established for decades.

21. Opinion 4: Walgreens has incentives to manipulate U&C prices.

22. Opinion 5: PBMs have incentives to let Walgreens manipulate U&C prices.

23. Opinion 6: Walgreens should have reported or otherwise included its PSC prices when determining the U&C prices to report.

24. Opinion 7: Walgreens has failed to meet the reasonable expectations of TPPs and their insured beneficiaries by failing to report or otherwise include its PSC prices when determining the U&C prices to report.

IV. BACKGROUND

25. The U&C concept is actually fairly simple. There are two types of prescription transactions: (1) "insured transactions," in which prescription claims are subject to payment in whole or in part by a private or government TPP; and (2) "uninsured transactions," in which the customer pays the full amount for a prescription without using an insurance benefit. The latter, "uninsured transactions," are also known as "cash transactions," because they do not involve an

“insurer” or TPP. Depending on how a prescription drug is paid for, a prescription drug is therefore purchased either by an “insured” customer or a “cash” customer.⁶

26. The U&C price sets the ceiling for the amounts charged to TPPs (and the prices charged to the TPPs’ insured beneficiaries in the form of patient cost-sharing).⁷ This is because insurers generally do not want pharmacy customers paying *without* insurance (*i.e.*, “cash customers”) to be charged lower prices than the insurers’ own beneficiaries are being charged for the same drug. Allowing pharmacy customers without insurance to get routinely lower prices than those with insurance would defeat the cost-containment purpose of insurance.

27. U&C pricing is designed to ensure that insured customers are not worse off than customers not using insurance. Prices paid by insurance programs are supposed to be lower than prices to cash customers. If it were otherwise, it would negate one of the most important advantages of using insurance.

28. Decades of industry practice establish that the U&C price has consistently been understood in the industry to mean the lowest price that a pharmacy would offer to a cash customer (*i.e.*, a customer paying without using insurance), including any discounts offered by the pharmacy to the cash customer for a specific drug product on a particular day at a particular pharmacy.

29. Equally common throughout the industry is that TPPs and their insured beneficiaries generally do not pay more than the lower of: (1) the plans’ determination of acquisition cost for drug ingredients, plus a specified dispensing fee (often referred to as the “negotiated” rate), which is what an “insured” customer would pay; or (2) the pharmacy’s U&C price, which is what a “cash” customer would pay.

30. The formula that effectuates this principle during the adjudication process is known as “lower of” logic. Regardless of the specific formulation, the “lower of” reimbursement formula ensures that **TPPs and their insured beneficiaries generally do not pay more than a pharmacy’s U&C price.**

⁶ Any prescription that does not involve insurance coverage is referred to as a “cash” prescription whether or not the price is discounted and whether the payment is made by currency, check, credit card, debit card, or other form of payment.

⁷ Patient cost-sharing effectively decreases TPPs’ costs by shifting some responsibility for payment directly to the patient. This practice is designed to not only decrease prescription costs, but also to decrease utilization rates. Patient cost-sharing can take one of three forms: (1) copayment – a specified dollar amount charged to patients each time they receive a prescription (*e.g.*, \$10 per prescription); (2) deductible – a specified amount that patients are required to cover out-of-pocket for certain services before insurance coverage becomes effective (*e.g.*, the first \$500 of prescription costs); and (3) coinsurance – a specified percentage of prescription costs charged to patients each time they receive a prescription (*e.g.*, 20% of the price). Cost-sharing provisions may also include out-of-pocket limits or maximum benefit limits. While copayments are the most common form of patient cost-sharing for prescription drugs, whenever the term “copayment” is used in this report, it is recognized that other forms of patient cost-sharing (*i.e.*, deductibles and coinsurance) may apply as well.

31. Walgreens has admitted that the PSC is “[REDACTED].”⁸ Walgreens’ PSC prices represented the prices Walgreens offered to cash customers. By failing to report or otherwise include its PSC prices when determining the U&C price to report, Walgreens’ PSC discount program defeated the reasonable expectations of insured customers, such as Individual Plaintiffs, and TPPs, such as Fund Plaintiffs, who reasonably expected that they would not pay more to receive PSC drugs than the amounts paid by cash customers (*i.e.*, customers not using insurance).

32. When the PSC price for a specified drug was offered to cash customers at any Walgreens pharmacy and represented the lowest price Walgreens offered to cash customers for that drug on that day at that pharmacy, Walgreens should have reported or otherwise included its PSC price when determining the U&C price to report for that drug.

V. BASIS OF OPINIONS

A. The Prescription Drug Claims Adjudication Process Is Common and Standardized Throughout the Industry

33. TPPs typically provide prescription drug benefits to their insured beneficiaries through pharmacies, such as Walgreens. In exchange for access to the TPPs’ insured beneficiaries, these pharmacies must follow policies and procedures, such as submitting the U&C price as part of the claims adjudication process.

34. Adjudication of a prescription drug claim is the process of accepting, reviewing, editing, and making judgments regarding the payment of insured prescription drug claims. It involves not only eligibility and payment determinations, but many other functions, such as “prospective DUR [drug utilization review] edits[,] . . . [d]rug-to-drug interaction checking, duplicate therapy detection, . . . validating the dosage of the drug and the duration of therapy . . . [and] evaluat[ion] [of] a drug in relation to the patient’s health condition, age, gender, or prescription history.”⁹ The adjudication process can also involve step therapy or prior authorization and focusing on guidelines based on specific conditions or disease states.¹⁰ If it were not for this process, it would be impossible to split the cost of the drug between the insured beneficiary and TPP at the time of purchase. Two of the claims adjudication basic functions relevant to this case are: (1) calculating the division of the purchase price between the insured beneficiary and the TPP, including the consideration of any unsatisfied deductibles or caps on out-of-pocket expenditures or benefits. This would be impossible if the system did not store and link data on the insured beneficiary’s prior claims activity; and (2) committing the TPP to pay the pharmacy its share of the drug price together with an agreed upon dispensing fee. Aggregated billing and prompt payment to the pharmacy would be impossible without this underlying accounting detail.

⁸ Walgreens’ Objections and Responses to Plaintiffs’ Second Set of Requests for Admission (July 30, 2020), Response to Request for Admission No. 67.

⁹ Discussion of “Prescription Benefit Management Adjudication Systems” in Garth E. Black & John H. Romza, ch. 7, *Managed Care Pharmacy Information Systems*, in Robert P. Navarro, *Managed Care Pharmacy Practice* at 205-07 (2d ed. 2009).

¹⁰ *Id.*

35. Prescription drug claims adjudication, by definition, involves insurance. Adjudication functions are thus successfully completed only for prescription drug transactions covered by insurance and are not necessary when prescription drug transactions do not involve insurance and are paid in full by the customer.

36. Walgreens, like most retail pharmacies, submits insured prescription drug claims to PBMs for adjudication using an online, real-time claims adjudication system that typically processes claims within seconds. This real-time claims adjudication system was the result of industry-wide collaboration. In the 1970s, pharmacies, insurers, and prescribers all recognized the critical importance of arriving at a single, standardized, nationwide system that would result in migration away from paper prescriptions and claims.¹¹ The multi-disciplinary NCPDP was charged with designing a universal claim form and, eventually, standards for electronic processing of claims that would rely on “Telecommunications.”¹² The development of an electronic messaging protocol and precise data architecture was shared by the entire industry and is referred to generally as an industry standard.^{13,14,15} The first set of such standards was issued in 1988 and there have since been several comprehensive updates/versions as well as a continuous process of minor enhancements and additions.¹⁶ Use of the NCPDP standards became mandatory under HIPAA regulations in 2003.^{17,18} Version D.0 has been in effect since 2010.¹⁹ The participants in

¹¹ NCPDP, “Pharmacy: A Prescription for Improving the Healthcare System,” October 2009 at p. 9.

¹² *Id.* at p. 6.

¹³ *Id.* at p. 14.

¹⁴ Robert Garis, et al., *Examining the Value of Pharmacy Benefit Management Companies*, 61 Am. J. of Health Sys. Pharmacy 1, 83 (2004), http://www.medscape.com/viewarticle/466688_4 (last accessed Aug. 16, 2022).

¹⁵ Chris Dymon, Walgreens’ Director of Third-Party Operations, gave testimony that comports with my understanding on this issue by stating that the elements submitted for a claim are defined by NCPDP and are standard for all prescription claims and payers. Oct. 5, 2018 Deposition of Chris Dymon (“Dymon Dep.”) at 9:11-10:10.

¹⁶ NCPDP, “Pharmacy: A Prescription for Improving the Healthcare System,” October 2009 at pp. 1, 6 & 13-14.

¹⁷ 45 C.F.R. §162.

¹⁸ 65 Fed. Reg. 50312; NCPDP, “*Pharmacy: A Prescription for Improving the Healthcare System*,” October 2009 at p. 14.

¹⁹ NCPDP, “Telecommunication Version D.0” last accessed Aug. 31, 2022 at <https://www.ncpdp.org/Resources/HIPAA-Information> (“Telecommunication Standard Implementation Guide, Version D, Release 0 (Version D.0), August 2007”) (American National Standards Institute approved in August 2007). NCPDP has published updates of the Telecommunication Standard since Version D.0, but D.0 is still the version mandated by HIPAA (Centers for Medicare & Medicaid Services, “*Adopted Standards and Operating Rules*,” last

the pharmacy supply chain, including insured beneficiaries and TPPs, rely on the accurate reporting of data in accordance with NCPDP standards in order for the telecommunications architecture to function. Without reporting of accurate data, the HIPAA-mandated telecommunications infrastructure cannot function as the participants in the pharmacy supply chain expect. Each participant that reports data is expected to report data accurately, pursuant to these industry standards, and the very fact of reporting using NCPDP standards signals to other participants in the pharmacy supply chain, including insured beneficiaries and TPPs, that the data is being reported accurately pursuant to industry standards.

37. The United States District Court for the District of Southern Illinois determined in *Garbe* that the “standard across the pharmacy industry for U&C price falls in line with [the] NCPDP definition” and is “generally referred to within the industry as the ‘***cash price to the general public***,’ which is the amount charged cash customers for the prescription, exclusive of sales tax or other amounts claimed.”²⁰

38. When a pharmacy submits prescription drug claims through a PBM’s online adjudication system, NCPDP standards specify that U&C prices are submitted in the U&C Pricing Segment Field 426-DQ.^{21,22} Only one value can be added to the field, which is unique to a particular prescription drug product, strength, and dosage form identified by NDC number.²³

39. Once the prescription drug information is submitted by a pharmacy and is accepted for reimbursement by the adjudication system (*i.e.*, the claim is eligible for reimbursement), PBMs and their claims adjudication systems rely upon the information submitted by the pharmacy to determine both the amount that TPPs and insured beneficiaries must pay for a given prescription drug.²⁴ If pharmacies like Walgreens do not submit accurate information, then the prescription

accessed Aug. 31, 2022 at <https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/HIPAA-ACA/AdoptedStandardsandOperatingRules.html>).

²⁰ *United States ex rel. Garbe v. Kmart Corp.*, 73 F. Supp. 3d 1002 at 1014-15 (S.D. Ill. 2014) (emphasis in original).

²¹ NCPDP / Forth v Walgreens 000001 at 0192 (*NCPDP Data Dictionary* (January 2017)).

²² The term “other amounts claimed” refers to costs such as sales tax, shipping, delivery, postage, etc., that are not considered part of the U&C price. NCPDP / Forth v Walgreens 000340 at 0729 (External Code List (Jan. 2017) App’x Z – Other Amount Values).

²³ Dymon Dep. at 28:16-17, 41:3-9 & 69:13-24.

²⁴ According to Chris Dymon, Walgreens’ Director of Third-Party Operations, the following information must be entered into the Intercom Plus system: the date, the drug name, quantity, quantity dispensed, number of refills authorized, the directions for taking the medication, and the prescriber’s identification. The pharmacy must also submit its U&C price for the prescription, which is usually in a database accessed by the computer. The customer is asked for insurance information. Intercom Plus determines whether the customer has a PSC membership on file. The data are sent electronically by Walgreens to a “switch vendor” and then to the TPP or its agent. This is a two-way system, where the payer’s response to claim is submitted back to Walgreens through the switch vendor. Information received back from the payer includes: (1) a response confirming payment along with the amount of any copayment due from the customer or (2) a

drug adjudication system will not function as intended and TPPs and their insured beneficiaries may be overcharged for prescriptions. The claims submission and adjudication process is common among insured prescription drug programs.

B. The Use of “Lower of” Logic Is Common and Standard Throughout the Industry

40. The U&C price serves as a “ceiling” or “cap” on prescription drug prices for TPPs and their insured members. The U&C price ceiling is meant to ensure that TPPs and their insured beneficiaries do not pay more for a particular drug than the price offered to cash-paying customers (*i.e.*, customers not using a prescription insurance benefit).

41. The U&C price ceiling is effectuated through the use of “lower of” logic that is used throughout the pharmacy industry.²⁵ Under “lower of” logic, plans and insured customers pay the lower of (1) the price charged to customers with insurance – which might be determined by reference to, among others, the MAC, AAC, WAC, or AWP;²⁶ or (2) the U&C price the pharmacy offers to those customers paying without using insurance (*i.e.*, “cash customers”).

42. I am not aware of any third-party prescription programs that did not use the “lower of” logic during the Class Period (*i.e.*, 2007-present).

43. David Halter, MedImpact’s 30(b)(6) designee, testified that lesser of pricing was “████████” and that “████████.”²⁷

44. David Schroff, CastiaRx’s 30(b)(6) designee, testified that “████████.”²⁸

rejection code (if rejected). The elements submitted for a claim are defined by the NCPDP, which are standard for *all* prescription claims and payers. *See id.* at 8:16-21:21.

²⁵ “Lower of” logic is also referred to as “lesser of” logic; both refer to the same concept.

²⁶ AAC is the price that pharmacies pay for drug products after subtracting all discounts. AWP is a list price for a drug product established by the manufacturer. Pharmacies receive discounts off AWP, and third-party reimbursement is often based on a percentage of AWP. WAC is a manufacturer’s list price for drug products sold to wholesalers or direct purchasers and third-party reimbursement may be based on a percentage of WAC. MAC is a price set by the PBM for multiple-source drug products and applies to all generic equivalents of that product regardless of the acquisition cost by the pharmacy.

²⁷ Dec. 19, 2019 Deposition of David E. Halter, Jr. (“Halter Dep.”) at 49:3-6; 228:2-10; *see also* MI-F 00000772 ██████████

████████; MI-F 00000953 (████████”).

²⁸ June 15, 2020 Deposition of David Schroff (“Schroff Dep.”) at 198:13-23.

45. Mitch Kempker, MedTrak's 30(b)(6) designee, [REDACTED]

²⁹

46. Christi Piti, SavRx's 30(b)(6) designee, [REDACTED]

³⁰

47. Brian Correia, Caremark's 30(b)(6) designee, testified that [REDACTED]

³¹

48. TPPs have generally long been aware and reasonably understand that they pay based on the lower of the pharmacy's U&C price or the price negotiated with the PBM. If the amount the pharmacy offers to a cash-paying customer is lower than the price that would be charged to a TPP's insured member, the pharmacy must accept reimbursement from the TPP (through the PBM) at the lower U&C price.

49. It is similarly reasonable for insured customers, such as Individual Plaintiffs, to expect that they will not pay more than customers without insurance. For example, both Cade Erlund, Walgreens' former Manager of Pricing Strategy, and Erica Reaves, Walgreens' Director of Contract Development, agreed that [REDACTED]

³² Caremark's Senior Vice President

of Network Services agreed that [REDACTED]

³³

C. The Industry Definition of U&C Is Common and Has Been Established for Decades

50. For decades, there was no dispute about the definition of U&C – it was universally understood to be the lowest price offered by a pharmacy to customers paying for a prescription drug without insurance, including all discounts.

51. Tantamount to a usage in trade for retail prescription drug pricing, the concept of U&C pricing has been used for decades and reflects an approach to pricing so commonly observed as to justify an expectation that the U&C price would be employed as the ultimate measure of cost containment.

52. The definition of U&C price was commonly understood to refer to the price offered to customers not using a prescription insurance benefit (*i.e.*, cash customers), including all discounts. Consequently, certain written agreements did not even bother to define U&C price because the meaning of U&C price was understood, as was the expectation that TPPs and their

²⁹ July 16, 2020 Deposition of Mitch Kempker ("Kempker Dep.") at 51:25-52:14.

³⁰ Sept. 30, 2020 Deposition of Christy Piti ("Piti Dep.") at 223:7-224:2.

³¹ Sept. 17, 2020 Deposition of Brian Correia ("Correia Dep.") at 149:8-150:13.

³² Aug. 21, 2019 Deposition of Erica Reaves ("Reaves Dep.") at 73:19-74:1; Oct. 2, 2019 Deposition of Cade Erlund ("Erlund Dep.") at 82:14-22; 86:9-87:1.

³³ Correia Dep. at 123:21-124:22.

insured beneficiaries would be entitled to a “lower of” requirement that limited charges to the U&C price ceiling.³⁴

53. Thus, the longstanding industry understanding of U&C price is the price that a pharmacy offers to a cash-paying member of the general public (*i.e.*, those who are not using an insurance benefit), for a given drug on a given day at a particular location, inclusive of any discounts. Because the U&C price focuses on a pharmacy’s willingness to accept a price for a given drug, the concept of U&C price is not necessarily synonymous with a pharmacy headquarters-created “retail price.” This industry understanding and expectation is reflected in numerous sources as set forth below.

1. National Council for Prescription Drug Programs

54. NCPDP is an accredited, not-for-profit organization designated to standardize how electronic payment data is transferred between pharmacies, PBMs, and TPPs.³⁵ In other words, NCPDP is the authority in the industry on standardized electronic payment processing.

55. Standards for the electronic transmission of prescription claims established by the NCPDP define “U&C price” as “[the] [a]mount charged cash customers for the prescription exclusive of sales tax or other amounts claimed.”³⁶ NCPDP standards elaborate that the U&C price “represents the value that a pharmacist is willing to accept as their total reimbursement for dispensing the product/service to a cash-paying customer.”³⁷ In my opinion, “total reimbursement” in this context connotes no funds additional to those paid by the customer are paid to the pharmacy – in other words, a cash customer, and not an insured customer because no TPP or insurer is involved.

³⁴ I understand one exception to the U&C definition is for “one-time individual pharmacist’s discretionary offers.” As the term suggests, these are for one-time discounts provided by the pharmacist. These could include, for example, offering a one-time discount for an indigent person who is unable to pay the full price for a life-saving medication. Discounts offered to the general public would not fit this definition. Since any member of the general public can qualify for membership program discounts, they represent cash prices that are “routine” discounts and, therefore, are not exempt from U&C.

³⁵ NCPDP, Who We Are, <https://www.ncpdp.org/Who-We-Are.aspx> (last accessed Nov. 8, 2022).

³⁶ NCPDP / Forth v Walgreens 000001 at 0192 (*NCPDP Data Dictionary* (January 2017)).

³⁷ Mistarz Deposition Exhibit (“Dep. Ex.”) 145 (*NCPDP Telecommunications Version 5: Questions, Answers and Editorial Updates* (Nov. 2010)) at 39; Dec. 20, 2019 Deposition of Megan Mistarz (“Mistarz Dep.”) at 79:12-81:3.

2. Medicare Part D

56. The CMS³⁸ issued specific regulatory guidance more than a decade ago in response to the introduction of various cash discount programs at retail pharmacies.³⁹ The guidance, contained in a CMS memorandum from Cynthia Tudor, then-Director of Medicare Drug Benefit Group, dated October 11, 2006, referenced the Walmart \$4 discount program as an example of a program that offered customers reduced prices (e.g., \$4.00) for many generics and directed that the discounted price, in turn, established the pharmacy's U&C price for those drugs. The memorandum explained that, when a discounted price is offered to customers generally, that discounted price becomes the pharmacy's U&C price. Such discounts are considered U&C prices rather than "one-time 'lower cash prices.'"^{40,41}

57. This policy was also included in the CMS *Medicare Prescription Drug Benefit Manual* and posted on the "Frequently Asked Questions" section of the CMS website. The CMS guidance stated:

Wal-Mart recently introduced a program offering a reduced price for certain generics to its customers. The low Wal-Mart price on these specific generic drugs is considered Wal-Mart's "usual and customary" price, and is not considered a one-time "lower cash" price. Part D sponsors consider this lower amount to be "usual and customary" and will reimburse Wal-Mart on the basis of this price. To illustrate, suppose a Plan's usual negotiated price for a specific drug is \$10 with a beneficiary copay of 25% for a generic drug. Suppose Wal-Mart offers the same generic drug throughout the benefit for \$4. The Plan considers the \$4 to take the place of the \$10 negotiated price. The \$4 is not considered a lower cash price, because it is not a one-time special price. The Plan will adjudicate Wal-Mart's claim for \$4 and the beneficiary will pay only a \$1 copay, rather than a \$2.50 copay. This means that both the Plan and the beneficiary are benefiting from the Wal-Mart "usual and customary" price, and the discounted Wal-Mart price of the drug is

³⁸ CMS is an HHS agency that oversees the Medicare and Medicaid programs.

³⁹ Memorandum from Cynthia Tudor, Director of the CMS Medicare Drug Benefit Group and CMS (Oct. 11, 2006), https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovContra/Downloads/QADiscountsandTrOOP_100606.pdf; *Medicare Prescription Drug Benefit Manual*, Ch. 14 – Coordination of Benefits, Section 50.4.2., <https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovContra/Downloads/Chapter-14-Coordination-of-Benefits-v09-17-2018.pdf>.

⁴⁰ Memorandum from Cynthia Tudor at 1 n.1.

⁴¹ One-time lower cash prices (also referred to as "one-time special prices" or "one-time pharmacist's discretionary offers") are discounts provided by the pharmacist. These could include, for example, offering a one-time discount for an indigent person who is unable to pay the full price for a life-saving medication. Discounts offered to the general public do not fit this definition. Since any member of the general public can qualify for membership program discounts, they are "routine" discounts and, therefore, are not exempt from U&C.

actually offered within the Plan’s Part D benefit design. Therefore, the beneficiary can access this discount at any point in the benefit year, the claim will be adjudicated through the Plan’s systems, and the beneficiary will not need to send documentation to the plan to have the lower cash price count toward TrOOP.^{42,43}

58. In the context of Medicare Part D, PBMs are thus required to ensure that the government pays no more for prescription drugs than what cash customers (*i.e.*, those paying without insurance) pay for the same drug on the same day.

3. State Medicaid Programs

59. State Medicaid programs incorporate the “lower of” U&C requirements embodied in 42 C.F.R. §447.512, which provides that payment for drugs should not exceed pharmacies’ usual and customary charges to the general public.⁴⁴ Accordingly, a key price component in these state Medicaid reimbursement formulas is the U&C price.

60. Most state Medicaid programs consider the U&C price to be the lowest price offered by the pharmacy to members of the general public, inclusive of discounts. References to the “general public” are synonymous with referencing cash-paying customers (*i.e.*, those not using insurance).

61. I am not aware of any state Medicaid program that excludes “membership club” discounts from their definitions of U&C.

62. When state Medicaid programs became aware that certain pharmacies and PBMs were manipulating U&C by excluding such discounts, many made it clear through regulations, agreements, provider manuals, and/or communication with providers that U&C was not to be manipulated in such a fashion. I am aware of several state Medicaid programs that now expressly clarify that the U&C price must include discounts offered through “membership club” programs or similar programs. For example:

⁴² Memorandum from Cynthia Tudor at 1 n.1. The “one-time ‘lower cash’ price” mentioned in the second sentence refers to non-routine discounts provided at the discretion of the dispensing pharmacist. For example: a one-time discount for an indigent person who is unable to pay the full price for a life-saving medication. It does not refer to prices offered to customers throughout a benefit year, such as PSC discount prices.

⁴³ TrOOP represents the amount that Medicare Part D recipients pay in the form of deductibles, coinsurance and copayment. CMS requires pharmacies to submit claims for all prescription expenditures – whether paid by insurance or not – so that patients’ TrOOP can be used to determine which coverage phase the beneficiary is in (*i.e.*, deductible phase, donut hole, catastrophic coverage phase, etc.).

⁴⁴ See 42 C.F.R. §447.512.

63. Alaska's Department of Health and Social Services define "Usual and Customary" as "the lowest amount a provider charges to the general public and reflects all advertised savings, discounts, special promotions, or other programs."⁴⁵

64. Colorado Medicaid regulations require that each healthcare claim identify the "Usual and Customary Charge,"⁴⁶ which is defined as "the reimbursement amount the provider charges the general public to pay for a drug."⁴⁷ The *Colorado Pharmacy Billing Manual* similarly defines the "Usual and Customary Charge" as the "[a]mount charged cash customers for the prescription exclusive of sales tax or other amounts claimed."⁴⁸ In a September 2008 *Provider Bulletin*, Colorado stated: "Pharmacies who offer prescription discount programs must use their discounted prices as the usual and customary charge on Medicaid claims. Pharmacies should not submit higher prices on Medicaid claims than prices offered to the general public."⁴⁹

65. The OAR defines "Usual and Customary Price" as "[a] pharmacy's charge to the general public that reflects all advertised savings, discounts, special promotions, or other programs including membership based discounts, initiated to reduce prices for product costs available to the general public, a special population, or an inclusive category of customers."⁵⁰ The OAR also specifically states: "When billing the [Health System] Division for a prescription, the pharmacy shall bill the lowest amount accepted from any member of the general public who participates in the pharmacy provider's savings or discount program."⁵¹

66. Pennsylvania's Administrative Code defines the "Usual and Customary Charge" in relevant part as: "The pharmacy's lowest net charge an MA recipient would pay for a prescription as a non-Medicaid patient at the time of dispensing for the same quantity and strength of a particular drug or product, including applicable discounts, such as special rates to nursing home residents, senior citizens, or other discounts extended to a particular group of patients, including generic drug discount and savings programs."⁵²

⁴⁵ Alaska Admin. Code tit. 7 §145.400 (h).

⁴⁶ 10 Colo. Code Regs. §2505-10:8.800.10.B.

⁴⁷ 10 Colo. Code Regs. §2505-10:8.800.1.

⁴⁸ Colorado Medical Assistance Program, Pharmacy Billing Manual at 19 (rev. Oct. 2013).

⁴⁹ See Colorado Department of Health Care Policy & Financing Provider Bulletin at 2, *United States, ex rel., Proctor v. Safeway, Inc.*, No. 11-cv-3406, ECF 188-37 (C.D. Ill. Dec. 23, 2019).

⁵⁰ Or. Admin. R. 410-121-0000 (3)(LL); see also *Humana v. Walgreen Co.*, No. 01-19-0002-5131 (Am. Arb. Ass'n) Ex. 826 (Notice from Oregon Health Authority, Division of Medical Assistance Programs regarding definition of usual and customary price effective September 1, 2011).

⁵¹ Or. Admin. R. 410-121-0150 (4)(a)(B); see also *Humana v. Walgreen Co.*, No. 01-19-0002-5131 (Am. Arb. Ass'n) Ex. 826 (Notice from Oregon Health Authority, Division of Medical Assistance Programs regarding billing requirements effective September 1, 2011).

⁵² 55 Pa. Code §1121.2.

67. Tennessee defines the term “Usual and Customary Charge” as: “The reasonable, usual and customary fees charged by the Pharmacy which do not exceed the fees the Pharmacy would charge any other person regardless of whether the person is a TennCare enrollee, inclusive of any special marketing or prescription drug programs offered by the Pharmacy.”⁵³

68. Washington Medicaid Administrative Code defines usual and customary price as “[t]he fee that the provider typically charges the general public for the product or service.”⁵⁴ Washington’s *Medicaid Provider Guide* states that reimbursement for prescriptions cannot exceed “[t]he provider’s usual and customary charge to the non-Medicaid population.”⁵⁵ It goes further, however, to make it clear that all discounts are to be passed on as the U&C price: “If the pharmacy provider offers a discount, rebate, promotion, or other incentive that directly relates to the reduction of the price of a prescription to the individual non-Medicaid customer, the provider must similarly reduce its charge to the Agency for the prescription. (Example: A \$5.00 off coupon for purchases elsewhere in the store.).”⁵⁶

69. The Texas Medicaid program notified pharmacies:

Based on requirements in the Texas Administrative Code, pharmacies that use a prescription discount plan (such as the Walmart \$4 Rx Program) or who actively match the plan prices, should reflect the discounted prices in their Medicaid prescription claims. The discounted prices should be submitted in the Usual and Customary price for claims paid by Texas Medicaid, CHIP, CSHCN, and KHC. For plans that require membership, pharmacies are asked to enroll all of their Medicaid and other state program patients. Requiring a special identification card does not disqualify Medicaid clients from receiving the discounted pricing.⁵⁷

70. Accordingly, state Medicaid programs reinforce the long-held industry understanding that U&C includes “membership club” discounts. This issue was disputed and settled in another state – Connecticut – as described below.

71. In 2008, the DSS informed Walgreens that it was overcharging DSS by failing to report its PSC prices as Walgreens’ U&C prices.

⁵³ Magellan Pharmacy Solutions, *Participating Pharmacy Agreement for Ambulatory and Long Term Care Pharmacy Providers* §1.27 (TDCI TennCare Div. Apr. 1, 2013).

⁵⁴ Wash. Admin. Code §388-530-1050 (Definitions), which became Wash. Admin Code §182-530-1050 (Definitions) (2018).

⁵⁵ Washington State Health Care Authority, *Medicaid Provider Guide: A Guide to Prescription Drug Program* (Wash Admin. Code, chs. 182-530) (May 3, 2012), Washington State Health Care Authority at H.2 (2014); *see also* Washington State Dep’t of Soc. & Health Svrs., *Medical Assistance Administration Prescription Drug Program Billing Instructions* at J.1 (Feb. 2003) (citing Wash. Admin. Code §388-530-1300).

⁵⁶ *See supra* n.55.

⁵⁷ *See* Opinion at 17, *United States, ex rel., Proctor v. Safeway, Inc.*, No. 11-cv-3406, ECF 202 (C.D. Ill. Jun. 12, 2020).

72. DSS concluded that Walgreens' PSC prices are the "usual and customary charge to the general public."⁵⁸

73. In a declaratory ruling issued on December 28, 2010, DSS determined:

PSC membership and the associated opportunity to receive the benefits of PSC discount drug pricing is **not** limited to a specific group or category of Walgreens' customers. . . .

Discount drug charges through the PSC are offered and available to *all* Walgreens' customers, without regard to age, gender, or any other associational characteristics. The discount, therefore is far from "special."⁵⁹

74. In a ruling that followed, DSS ordered Walgreens to report to DSS its PSC prices as Walgreens' U&C for qualifying prescription drugs.

75. A final settlement, reached in December 2012, stated that Walgreens designed and implemented a methodology to calculate on a monthly basis the difference between Walgreens' PSC prices and the prices reported to DSS. Walgreens made retroactive reconciliation payments to DSS for every month for the period between March 24, 2012, through July 31, 2013, and agreed that Walgreens would comply with Medicaid requirements to factor PSC prices into the usual and customary calculation by making monthly reconciliation payments to DSS on an ongoing basis.⁶⁰

4. Federal Employee Program Insurance Benefits

76. The FEP provides health insurance to approximately eight million federal employees, retirees, and their dependents.⁶¹

77. Brian Correia, Caremark's Rule 30(b)(6) designee (a PBM), testified that, in 2012, FEP "██████████" :⁶²

78.

63

⁵⁸ DSS0021-0050 at 0029 (Connecticut Department of Social Services, *Declaratory Ruling*, Dec. 28, 2010).

⁵⁹ *Id.* at 0031 (emphasis in original).

⁶⁰ DSS0196-205 (Settlement Agreement, *Walgreen Co. v. Dep't of Soc. Servs.*, HHB-CV-6008958 and HHB-CV-12-6015304 (Dec. 20, 2012)) (between Walgreens and the State of Connecticut).

⁶¹ Congressional Research Service, *Federal Employees Health Benefits (FEHB) Program: An Overview*, R43922 (Feb. 3, 2016), <https://sgp.fas.org/crs/misc/R43922.pdf>.

⁶² Correia Dep. at 262:5.

⁶³ *Id.* at 261:18-263:20.

79. When asked: “

”⁶⁴ Mr. Correia testified “ ,”

”⁶⁵

”⁶⁶ I

understand “providers,” as Mr. Correia used the term, to refer to pharmacies. I further understand “pricing” to refer to membership club pricing. Caremark then

”⁶⁷

80. This demonstrates that

5. *United States v. Garbe*

81. My understanding of industry practice regarding U&C pricing accords with the Seventh Circuit’s reasoning in *Garbe*.⁶⁸ In my opinion, *Garbe* presents a clear and accurate explanation of how U&C pricing practices should be applied in the pharmaceutical industry, as well as the policies supporting and necessitating that application. As also noted accurately in *Garbe*, the U&C price is not simply a price arbitrarily set by a pharmacy, but is a price based on the actual prices offered by the pharmacy to the general public, namely to its cash customers.⁶⁹

6. Contracts and Other Plan Documents

82. In response to Plaintiffs’ Interrogatory No. 9⁷⁰ and Plaintiffs’ Request for Admission No. 26,⁷¹ Walgreens

” . Further, in

response to Plaintiffs’ Interrogatory No. 28, Walgreens also admitted that “

⁶⁴ *Id.* at 163:16-18.

⁶⁵ *Id.* at 164:5-12.

⁶⁶ *Id.* at 263:10-13.

⁶⁷ *Id.* at 263:3-19.

⁶⁸ *United States ex rel. Garbe v. Kmart Corp.*, 824 F.3d 632-45 (7th Cir. 2016).

⁶⁹ *Id.*

⁷⁰ Walgreens’ Sixth Supplemental and Amended Objections and Responses to Plaintiffs’ First Set of Interrogatories (Nov. 20, 2020), Response to Interrogatory No. 9.

⁷¹ See *supra* n.8, Response to Request for Admission No. 26.

Consistent with this Interrogatory response, a team of Walgreens employees that [REDACTED]⁷²

[REDACTED]⁷³

83. [REDACTED]

[REDACTED], the language in contracts confirms the long-standing industry understanding that U&C refers to the lowest price that a pharmacy would offer to a cash customer (*i.e.*, a customer paying without using insurance), including any and all discounted prices offered by the pharmacy to the cash customer.

a. Plaintiffs' Pharmacy Benefit Management Agreements

84. Table 1 summarizes the U&C definitions of the PBM agreements between Fund Plaintiffs and the PBMs with whom they contracted. [REDACTED]

Table 1: PBM Agreement Definitions of Usual and Customary Price

Plaintiff	PBM	Date	Dep. Ex.	Bates No.	Definition of U&C
IUOE	Express Scripts, Inc.	6/03/14	89 (Catalano)	LOCAL295_000 1006 at 1009	[REDACTED]
IUOE	Express Scripts, Inc.	8/19/16	82 (Catalano)	LOCAL295_000 0138 at 0141	[REDACTED]
IBEW	Sav-RX Prescription Services, Inc.	6/1/06	75 (Fox)	IBEW_0017640 at 7657	[REDACTED]

⁷² *Id.*, Response to Request for Admission No. 28.

⁷³ Ewing Dep. Ex. 234 (“Contract Opportunities Grid”); *see also* Jan. 17, 2020 Deposition of Susan Christine Ewing (“Ewing Dep.”) at 128:16-18 (“There are going to be different words utilized but the intent and definition has always been the same.”); *see also id.* at 147:14-15.

Plaintiff	PBM	Date	Dep. Ex.	Bates No.	Definition of U&C
					[REDACTED]
IBEW	Caremark, L.L.C.	1/1/08	69 (Fox)	IBEW_0017690 at 7693	[REDACTED]
IBEW	Caremark, L.L.C.	1/1/19	185 (Schuler)	IBEW_0019626 at 9629	[REDACTED]
Steamfitters	MedTrak Services LLC	1/1/08	109 (Bailey), 310 (Kempker)	LOCAL439_000 1792 at 1794, MTRX_0001116 at 1118	[REDACTED]
Steamfitters	Leehar Distributors Missouri, LLC d/b/a CastiaRx	1/1/19	270 (Schroff)	LOCAL439_000 2146 at 2147	[REDACTED]

85. These definitions comport with my long-held understanding that U&C is the lowest price offered to cash customers (*i.e.*, those paying without insurance), including various discounts offered.

86. As set forth above, [REDACTED]

[REDACTED] ^{,74} [REDACTED] ^{,75} [REDACTED]
 [REDACTED]. Absent a definition in the PBM Agreement, the meaning of “U&C” would be consistent with the industry understanding of U&C. As further discussed below, the industry meaning of U&C is further reflected in PBMs’ public documents, such as provider manuals, and certain PBMs, like ESI, say that the provider manual definition of U&C will be used if U&C is not otherwise defined.

b. PBM Provider Manuals

87. PBMs typically publish provider manuals that dictate how pharmacies must handle claims for TPPs and their insured members. Provider manuals help ensure that pharmacies submit claims to PBMs in a uniform manner across a PBM’s network of pharmacies.

88. Unlike a PBM’s PPA, which is a confidential document between the PBM and a pharmacy, provider manuals are generally publicly available documents.

89. Table 2 summarizes examples of the definitions of U&C from multiple iterations of pharmacy provider manuals published by PBMs.⁷⁶ These definitions are similar in that they clearly indicate that the U&C is the price paid by cash customers (*i.e.*, those paying without insurance) and that discounts are included in U&C.⁷⁷ Some provider manuals are even more explicit – such as indicating that U&C is “the lowest price,” or that “any and all discounts” are included in U&C. None of these provider manual definitions exclude any types of discounts or exclude membership club programs from the definition of U&C.

Table 2: Provider Manual Definitions of Usual and Customary

Date	PBM	Bates No.	Definition of U&C
2013	Optum, Inc.	ORx_Worth_000482 at 0535	“The price, including all applicable customer discounts, such as special customer, senior citizen and frequent shopper discounts, that a cash paying customer pays Pharmacy for Drug Products, devices, products and/or supplies.”
2014	Optum, Inc.	ORx_Worth_001430 at 1490	“The price, including all applicable customer discounts, such as special customer, senior citizen and frequent shopper discounts, that a cash paying customer pays Pharmacy for Drug Products, devices, products and/or supplies.”

⁷⁴ Catalano Dep. Ex. 90.

⁷⁵ Schroff Dep. Ex. 270.

⁷⁶ For the purpose of this count, PBMs that have changed names, merged with, or been acquired by other PBMs are consolidated under a single banner.

⁷⁷ Although understood in the industry, the qualifier “lowest price” is often stipulated in these definitions.

Date	PBM	Bates No.	Definition of U&C
2015	Optum, Inc.	ORx_Worth_001910 at 1928	“Price charged by Network Pharmacy Provider to the general public at the time of dispensing for the same Drug Product including all applicable customer discounts, such as advertised or sale prices, special customer, senior citizen, frequent shopper, coupons or other discounts, a cash paying customer pays Network Pharmacy Provider for Drug Products, devices, products and/or supplies.”
2016	Optum, Inc.	ORx_Worth_002609 at 2627	“Price charged by Network Pharmacy Provider to the general public at the time of dispensing for the same Drug Product including all applicable customer discounts, such as advertised or sale prices, special customer, senior citizen, frequent shopper, coupons or other discounts, a cash paying customer pays Network Pharmacy Provider for Drug Products, devices, products and/or supplies.”
2017	Optum, Inc.	ORx_Worth_003061 at 3081	“Price charged by Network Pharmacy Provider to the general public at the time of dispensing for the same Drug Product including all applicable customer discounts, such as advertised or sale prices, special customer, senior citizen, frequent shopper, coupons or other discounts, a cash paying customer pays Network Pharmacy Provider for Drug Products, devices, products and/or supplies.”
2018	Optum, Inc.	ORx_Worth_003379 at 3398	“Price charged by Network Pharmacy Provider to the general public at the time of dispensing for the same Drug Product including all applicable customer discounts, such as advertised or sale prices, special customer, senior citizen, frequent shopper, coupons or other discounts, a cash paying customer pays Network Pharmacy Provider for Drug Products, devices, products and/or supplies.”
2019	Optum, Inc.	ORx_Worth_003697 at 3715	“Price charged by Network Pharmacy Provider to the general public at the time of dispensing for the same Drug Product including all applicable customer discounts, such as advertised or sale prices, special customer, senior citizen, frequent shopper, coupons or other discounts, a cash paying customer pays Network Pharmacy Provider for Drug Products, devices, products and/or supplies.”
2012	Catalyst Rx Health Initiatives, Inc.	ORx_Worth_000178 at 0205	“The usual and customary price refers to the cash price including all applicable customer discounts, coupons or sale price which a cash-paying customer would pay at the pharmacy.”
2013	Catalyst Health Solutions, Inc.	ORx_Worth_000399 at 0412	“Usual and Customary (U&C) charge means the usual and customary price charged by the Provider to the general public at the time of dispensing, including any advertised or sales

Date	PBM	Bates No.	Definition of U&C
			prices, discounts, coupons or other deductions.”
2014	Catalyst Health Solutions, Inc.	ORx_Worth_001060 at 1073	“U&C charge means the cash price charged by Provider to the general public at the time of dispensing for the same medication or product, including any advertised sale prices, discounts, coupons or other deductions.”
2007	MedImpact Healthcare Systems, Inc.	MI-F_00001156 at 1169	“Usual and Customary or U&C means the lowest price Member Pharmacy would charge to a cash paying customer at that location for an identical prescription on that day. This price must include any applicable discounts, promotions, or other offers to attract customers.”
2009	MedImpact Healthcare Systems, Inc.	MI-F_00001426 at 1439	“Usual and Customary or U&C means the lowest price Member Pharmacy would charge to a cash paying customer at that location for an identical prescription on that day. This price must include any applicable discounts, promotions, or other offers to attract customers.”
2011	MedImpact Healthcare Systems, Inc.	MI-F_00001250 at 1263	“Usual and Customary or U&C means the lowest price Member Pharmacy would charge to a cash paying customer at that location for an identical prescription on that day. This price must include any applicable discounts, promotions, or other offers to attract customers.”
2013	MedImpact Healthcare Systems, Inc.	MI-F_00001883 at 1897	“Usual and Customary or U&C means the lowest price Member Pharmacy would charge to a cash paying customer at that location for an identical prescription on that day. This price must include any applicable discounts, promotions, or other offers to attract customers.”
2014	MedImpact Healthcare Systems, Inc.	MI-F_00002160 at 2174	“Usual and Customary or U&C means the lowest price Member Pharmacy would charge to a cash paying customer at that location for an identical prescription on that day. This price must include any applicable discounts, promotions, or other offers to attract customers.”
2018	MedImpact Healthcare Systems, Inc.	IBEW_0020385 at 0414	“Usual and Customary or U&C means the lowest price Member Pharmacy would charge to a cash paying customer at that location for an identical prescription on that day. This price must include any applicable discounts, promotions, or other offers to attract customers.”

Date	PBM	Bates No.	Definition of U&C
2011	MedTrak Services LLC	MEDTRAK – 000028 at 0032	“The usual and customary charge is the lowest prescription price, including discounts, charged to a cash- paying patron for that drug on that day. Discounts to be reflected in a pharmacy’s usual and customary charge include: Discounts to senior citizens Discounts to frequent shoppers Discounts for members of special programs Professional discounts Discounts due to competitive pricing (e.g., price matching) Any other special discounts to attract patrons.”
2019	MedTrak Services LLC	IBEW_0020904 at 0909	“The usual and customary charge is the lowest prescription price, including discounts, charged to a cash-paying patron for that drug on that day. Discounts to be reflected in a pharmacy’s usual and customary charge include: Discounts to senior citizens Discounts to frequent shoppers Discounts for members of special programs Professional discounts Discounts due to competitive pricing (e.g., price matching) Any other special discounts to attract patrons.”
2004	Medco Health Solutions, Inc.	IBEW_0020799 at 0871	“Usual and Customary Price (“U&C”): The lowest net price a cash patient would have paid the day the prescription was dispensed inclusive of all applicable discounts. These discounts include, but are not limited to, senior citizen discounts, “loss leaders” frequent shopper or special customer discounts, competitor’s matched price, or other discounts offered customers.”
2009	Medco Health Solutions, Inc.	ESI-0001178 at 1253	“Usual and Customary Price (“U&C”): “The lowest net price a cash patient or customer would have paid the day the prescription was dispensed, inclusive of all applicable discounts. These discounts include, but are not limited to, senior citizen discounts, “loss leaders” frequent shopper or special customer discounts, competitor’s matched price, and other discounts offered to customers, including but not limited to buyer’s clubs with nominal membership fees, discount buying cards and programs.”
2005	Express Scripts, Inc.	IBEW_0020292 at 0363	“The usual and customary retail price of a Covered Medication in a cash transaction at the Pharmacy dispensing the Covered Medication (in quantity dispensed) on the date that it is dispensed, including any discounts or special promotions offered on such date.”

Date	PBM	Bates No.	Definition of U&C
2010	Express Scripts, Inc.	ESI-0000127 at 0220	“Usual and Customary Retail Price As defined in the Provider Agreement. If not defined in the Provider Agreement, then Usual and Customary Retail Price means the usual and customary retail price of a Covered Medication in a cash transaction at the Pharmacy dispensing the Covered Medication (in the quantity dispensed) on the date that it is dispensed, inclusive of “loss leaders”, frequent shopper or special customer discounts or programs, competitor’s matched price or any and all other discounts, special promotions, and programs causing a reduction in the price offered to that Member and offered by the Network Provider (or any of its Pharmacies) on such date. Additionally, the Usual and Customary Retail Price must include any applicable discounts offered to attract customers including Members.”
2016	Express Scripts, Inc.	ESI-0000323 at 0449	“To the extent not defined in the Provider Agreement, Usual and Customary Retail Price means the usual and customary retail price of a Covered Medication in a cash transaction at the Pharmacy dispensing the Covered Medication (in the quantity dispensed) on the date that it is dispensed, inclusive of “loss leaders”, frequent shopper or special customer discounts or programs causing a reduction in the price offered to that member and offered by the Network provider (or any of its Pharmacies) on such date. Additionally, the Usual and Customary Retail price must include any applicable discounts offered to attract customers including Members.”
2007	Caremark, L.L.C.	CAREMARK_FORTH-001807 at 1966	“Usual and Customary Price or U&C means the lowest price Provider would charge to a particular customer if such customer were paying cash for an identical prescription on that particular day at that particular location. This price must include any applicable discounts offered to attract customers.”
2009	Caremark, L.L.C.	CAREMARK_FORTH-002869 at 3040	“Usual and Customary Price or U&C means the lowest price Provider would charge to a particular customer if such customer were paying cash for an identical prescription on that particular day at that particular location. This price must include any applicable discounts offered to attract customers.”
2010	Caremark, L.L.C.	CAREMARK_FORTH-000193 at 0248	“Usual and Customary Price or U&C means the lowest price Provider would charge to a particular customer if such customer were paying cash for an identical prescription on that particular day at that particular location.

Date	PBM	Bates No.	Definition of U&C
			This price must include any applicable discounts offered to attract customers."
2011	Caremark, L.L.C.	CAREMARK_FORTH-003045 at 3262	"Usual and Customary Price or U&C means the lowest price Provider would charge to a particular customer if such customer were paying cash for an identical prescription on that particular day at that particular location. This price must include any applicable dispensing fee and/or level of effort. This price must include any applicable discounts offered to attract customers."
2013	Caremark, L.L.C.	CAREMARK_FORTH-001969 at 2209	"Usual and Customary Price or U&C means the lowest price Provider would charge to a particular customer if such customer were paying cash for an identical prescription on that particular day at that particular location. This price must include any applicable dispensing fee and/or level of effort. This price must include any applicable discounts offered to attract customers."
2016	Caremark, L.L.C.	Walg_Forth_00169301 at 9608	"Usual and Customary Price or U&C means the lowest price Provider would charge to a particular customer if such customer were paying cash for an identical prescription on that particular day at that particular location. This price must include any applicable dispensing fee and/or level of effort. This price must include any applicable discounts offered to attract customers."
2018	Caremark, L.L.C.	CAREMARK_FORTH-002519 at 2860	"Usual and Customary Price" or "U&C" means the lowest price Provider would charge to a particular customer if such customer were paying cash for an identical prescription on that particular day at that particular location. This price must include any applicable dispensing fee and/or level of effort. This price must include any applicable discounts offered to attract customers."
2018	Leehar Distributors Missouri, LLC d/b/a CastiaRx	LOCAL439 0002146 at 2147	"Usual and Customary" or "U&C" shall mean the lowest price, including any dispensing fee, a pharmacy would charge a particular customer without any insurance coverage, if such customer were paying cash for the identical drug on the date dispensed."
2018	Leehar Distributors Missouri, LLC d/b/a CastiaRx	CAST000530 at 0546	"Usual and Customary Retail price (U&C) means the retail price of a Covered Medication to the general public in a cash transaction at the Pharmacy dispensing the Covered Medication (in the quantity dispensed) on the date that it is dispensed."

90. These definitions comport with my long-held understanding that U&C is the lowest price offered to cash customers (*i.e.*, those paying without insurance), including various discounts offered.

91. Mitch Kempker, MedTrak's 30(b)(6) designee, [REDACTED]

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92. Provider manuals are more than just guidance. Pharmacies are typically required to adhere to a PBM's provider manual, and some PBMs make clear that the definitions in their provider manuals supersede any other definitions of U&C price. For example:

- a. Optum's 2015 provider manual states: "In the event this [provider manual] and the [PBM] Agreement have conflicting language, the [provider manual] will supersede the Agreement."⁷⁹
- b. Express Script's provider manual states: "In the event there is a conflict between the terms and conditions set forth below and the terms and conditions set forth in the Provider Agreement, the terms and conditions set forth below shall control."⁸⁰
- c. Medco's provider manual states: "To the extent that this Manual is inconsistent with any network schedules, the terms of this Manual govern."⁸¹
- d. The LDI provider manual states: "The Provider Manual shall be incorporated into the Agreement for all purposes, provided that the Provider Manual will control in the event of a conflict between the Agreement and the Provider Manual."⁸²

93. Furthermore, in 2017, in the wake of *Garbe*, ESI [REDACTED]

:
[REDACTED]

⁷⁸ Kempker Dep. at 45:8-49:15.

⁷⁹ *E.g.*, ORx_Worth_001910 at 1912 (Optum *Provider Manual*, 2015).

⁸⁰ Barnes Dep. Ex. 339 at 0364 (Express Scripts *Provider Network Manual*, 2005).

⁸¹ ESI-0000917 (Medco *Pharmacy Services Manual* 2009/2010).

⁸² See Schroff Dep. Ex. 279 at 0538 (LDI *Pharmacy Provider Manual*, 2018).

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94. As far as I am aware, Express Scripts' recent Provider Manuals since 2017 have [REDACTED].

c. Walgreens' Participating Pharmacy Agreements

95. Plaintiffs' counsel provided me with Walgreens' PPAs with what I understand to be the Relevant PBMs dated from 1996 to 2018.⁸⁴ The U&C definitions from these PPAs are summarized in Table 3. [REDACTED]

96. [REDACTED]

97. To the extent Walgreens and its PBM partners entered into a PPA with a definition of a key term, such as U&C price, that is inconsistent with that found in the PBMs' respective Agreements with their labor union TPP clients, like Fund Plaintiffs, neither Walgreens nor the PBM should be relieved of their obligation to submit accurate U&C prices, as required in the PBM Agreements. Walgreens and PBMs would have been aware of the long-held industry understanding of U&C. [REDACTED]

98. Since the terms of the PPAs are not available to TPPs and their members,⁸⁵ but the provider manuals (which represent that the U&C price refers to the price offered to cash customers

⁸³ Amiet Dep. Ex. 81 (One hundredth Amendment to the Express Scripts Pharmacy Provider Agreement with Walgreens) (emphasis added).

⁸⁴ PBMs that have changed name, merged with, or been acquired by other PBMs are consolidated under a single banner.

⁸⁵ Scott Schuler, Walgreens' 30(b)(6) designee testified [REDACTED]

[REDACTED] Jan. 17, 2020

Deposition of Scott Schuler ("Schuler Dep.") at 133:11-135:16.

including discounts) **are** publicly available⁸⁶ and are consistent with the industry understanding of U&C, it would be reasonable for TPPs and insured beneficiaries to expect that Walgreens was reporting its PSC prices as its U&C prices. They would have no way of knowing of any secret arrangements in which Walgreens and the PBMs agreed to reinterpret U&C contrary to the long-held industry understanding of the term to enrich themselves as the expense of the TPPs and their members.

Table 3: Pharmacy Provider Agreement Definitions of Usual and Customary Price

Date	PBM	Dep. Ex.	Bates No.	Definition of U&C
11/3/00	Optum, Inc.	83 (Amiet)	Walg_Forth_00051530_R at 1540-R	[REDACTED]
1/1/17	Optum, Inc.	174 (Schuler)	Walg_Forth_00053004 at 3008-3009	[REDACTED]
4/1/10	Catalyst Health Solutions, Inc.	376 (Johnson)	Walg_Forth_00055609 at 5613	[REDACTED]

⁸⁶ PBMs' provider manuals are publicly available. For example, Mitch Kempker, MedTrak Rx's Vice President of Operations agreed that MedTrak's provider manual was publicly available and that he was not aware of any definition of "U&C price" that varies from the definition in their provider manual. *See* Kempker Dep. at 64:3-18.

Date	PBM	Dep. Ex.	Bates No.	Definition of U&C
3/8/11	Catalyst Health Solutions, Inc.	75 (Amiet)	Wal_Forth_00050285 at 0290	[REDACTED]
10/1/10	MedImpact Healthcare Systems, Inc.	123 (Halter)	MI-F_00004169 at 4172	[REDACTED]
1/1/16	MedImpact Healthcare Systems, Inc.	124 (Halter)	MI-F_00003043 at 3048	[REDACTED]
7/1/99	MedTrak Services LLC	314 (Kempker)	Wal_Forth_00352849 at 2850	[REDACTED]
6/1/11	MedTrak Services LLC	315 (Kempker)	Wal_Forth_00139947 at 9950	[REDACTED]
7/1/99	Sav-RX Prescription Services, Inc.	371 (Piti)	Wal_Forth_00148167 at 8168	[REDACTED]
8/1/10	Sav-RX Prescription Services, Inc.	372 (Piti)	Wal_Forth_00144213 at 4217	[REDACTED]
1/1/09	Express Scripts, Inc.	326 (Barnes)	Wal_Forth_00193196 at 3199	[REDACTED]

Date	PBM	Dep. Ex.	Bates No.	Definition of U&C
7/19/12	Express Scripts, Inc.	80 (Amiet)	Wal_Forth_00095271 at 5273	[REDACTED]
10/1/17	Express Scripts, Inc.	82 (Amiet)	Wal_Forth_00180170 at 0170	[REDACTED]
1/31/01	Caremark, L.L.C.	236 (Ewing)	Wal_Forth_00320833 at 0842	[REDACTED]
1/1/16	Caremark, L.L.C.	238 (Ewing)	Wal_Forth_00102467 at 2481	[REDACTED]
1/1/18	Caremark, L.L.C.	79 (Amiet), 181 (Schuler)	Wal_Forth_00101361 at 1363, Wal_Forth_00074709 at 4711	[REDACTED]
10/27/10	Leehar Distributors Missouri, LLC d/b/a CastiaRx	110 (Bailey)	Wal_Forth_00143115 at 3119	[REDACTED]

7. Summary of U&C Definitions

99. The discussion above summarizes U&C price definitions from many sources. While the precise language used may differ marginally, the meaning of U&C is commonly used

throughout the industry to refer to the lowest price that a pharmacy would offer to a cash customer (*i.e.*, a customer paying without using insurance), including discounts.

100. As discussed below, Walgreens had a strong incentive to claim that its PSC was a “membership club” to conceal its true U&C prices. PBMs also had strong incentives to go along with Walgreens’ scheme – *even though their provider manuals and other documents confirm that they understood and adopted the standard industry definition of U&C price.*

101. The long-understood industry definition of U&C is still the same today.

D. Walgreens Has Incentives to Manipulate U&C Prices

102. Walgreens can influence the rate at which it is reimbursed by TPPs and their insured beneficiaries by altering its U&C price.

103. In a given prescription drug transaction, pharmacies make money by collecting: (1) the amount reimbursed by the PBM, which makes up the majority of the reimbursement a pharmacy receives; and (2) the cost-sharing amount paid by the insured customer, most commonly in the form of a copayment (*i.e.*, a flat amount, such as \$10.00 per prescription).

104. *Amount reimbursed by the PBM.* The PBM’s adjudication system is programmed to compare the U&C price submitted by the pharmacy to the negotiated rate. The PBM pays the pharmacy the lower of the two rates (by reference to lower of logic), minus the cost-sharing amount paid by the insured member. When the U&C price is less than the negotiated rate, the U&C price is the amount reimbursed to the pharmacy. Pharmacies, accordingly, prefer to set their U&C price above the negotiated rate to increase their profits.

105. Walgreens’ documents and employee testimony confirm Walgreens has the ability to influence its rate of reimbursement. Walgreens’ internal documents state that the “[REDACTED]”

Accordingly, Walgreens declared that its “[c]ash pricing strategy must consider 3rd party reimbursement.”⁸⁷ [REDACTED]

⁸⁷ Erlund Dep. Ex. 69 at 2433 (PSC “White Paper”).

106. Cade Erlund, Walgreens' former Manager of Pricing Strategy, agreed that "Walgreens has direct control over the price of prescription drugs that Walgreens charge to PSC members" and that "prices that Walgreens charges cash customers has an influence on its own rate of reimbursement from third-party payers."⁸⁸

107. ***Cost-sharing amount paid by the insured member.*** The PBM's adjudication system automatically calculates an insured customer's cost-sharing amount, usually in the form of a copayment, based in part on the U&C price submitted by the pharmacy. The adjudication system then informs the pharmacy of the cost-sharing amount to be collected from the insured customer. Insured beneficiaries are not involved in the claims adjudication process and have no knowledge of how the cost-sharing amount is determined if it is different from cost-sharing amounts indicated on their insurance ID card.

108. When Walgreens reports an inflated U&C price – that is, an amount that exceeds the price offered to customers paying without insurance – Walgreens has submitted false and inaccurate price information, which may result in an overcharge to the TPP and insured members.

109. In the 1970s, when prescription drug insurance programs were growing in popularity, pharmacies still had a significant number of cash prescriptions. Pharmacies sometimes offered prices to cash customers for certain items (such as oral contraceptives) that were lower than the negotiated prices for customers with insurance. Pharmacies, PBMs, and TPPs all understood that such prices, if the lowest price offered to cash-paying customers (*i.e.*, those not using insurance) for that product, would be the pharmacy's U&C price and should be reported as such.

⁸⁸ Erlund Dep. at 156:6-14.

⁹⁰ Consistent with Walgreens' internal documents, pharmacies tended to set prices offered to cash customers (*i.e.*, customers who paid without insurance) above the negotiated rates paid for by insured customers, and, therefore, relatively few claims adjudicated at the U&C price.

111. This changed in 2006 when Walmart implemented its generic discount program and advertised a \$4 charge for 30-day supplies of about 300 prescription drug products. Walmart correctly submitted prescription drug insurance claims reflecting its discount prices as its U&C price for these drugs. Other national pharmacy chains, such as Target and Costco, subsequently implemented similar discount programs specifically to compete with Walmart, and also reported these discounted prescription drug prices as the U&C price.⁹¹

112. At about the time Walmart, Target, and Costco were scrambling to compete with each other using these new discount prescription drug programs, other pharmacies, including Walgreens, began to worry that if they implemented similar discounts, they would jeopardize their reimbursement amounts from TPPs because they would have to submit the reduced U&C prices on prescription drug insurance claims.

113. In response, Walgreens contrived the PSC.

[REDACTED] . According to Jay Bernstein, Walgreens' former Manager for Product Development and Innovation, the PSC discount club would "a [REDACTED]

„92

114. Despite offering deep discounts to cash customers through the PSC, Walgreens failed to report its discounted PSC prices as its U&C prices. Rather, Walgreens continued to submit prescription drug insurance claims with artificially high U&C prices. However, as explained in the preceding paragraphs, the discounted prescription drug prices offered to these customers who paid for their prescriptions without using insurance (*i.e.*, “cash customers”) should have been submitted as the U&C price for the drug when purchased by a customer who *was* using insurance to pay for the drug.

⁸⁹ National Association of Chain Drug Stores, *The Chain Pharmacy Industry Profile* at 64-65 (2006).

⁹⁰ Erlund Dep. Ex. 69 at 2435.

⁹¹ Pharmacies such as CVS, Kmart, Kroger, Rite Aid, Safeway, and Walgreens (among others) did not.

⁹² Bernstein Dep. Ex. 55 at 8060 (September 8, 2013 internal email).

115. [REDACTED]

[REDACTED] 93,94

[REDACTED] 95

[REDACTED] 96

[REDACTED] 97

116. [REDACTED]

[REDACTED] 98

[REDACTED] 99

[REDACTED] :

[REDACTED]

⁹³ *Id.*

⁹⁴ Erlund Dep. Ex. 63 (“Everything You Ever Wanted to Know About the PSC,” Lunch and Learn materials, Aug. 24, 2011).

⁹⁵ Sept. 14, 2019 Deposition of Jay Bernstein (“Bernstein Dep.”) at 96:8-97:5.

⁹⁶ Erlund Dep. Ex. 69 at 2434.

⁹⁷ Erica Reaves, Walgreens’ Director of Contract Development, admitted that Walgreens sometimes charged insured customers copayments that exceeded the PSC price paid by customers not using insurance, but did not find fault with this outcome. *See* Reaves Dep. at 76:9-24.

⁹⁸ Erlund Dep. Ex. 69 at 2435.

⁹⁹ *Id.*

117. “

100

E. PBMs Have Incentives to Allow Walgreens to Manipulate U&C Prices

118. PBM^s have economic incentives to allow Walgreens to manipulate U&C price reporting because PBM^s paradoxically make more money when pharmacies submit higher U&C prices. This is true whether the PBM is offering pass-through pricing or spread pricing, although incentives for the latter are even greater.

119. To understand PBMs' incentives to allow pharmacies to manipulate their U&C price reporting, it helps to understand that a lack of transparency in their business dealings allows PBMs to have many sources of income that create potential conflicts of interest with their TPP clients and the TPPs' members.

120. First, PBMs may want to market their effectiveness by showing TPPs, such as Fund Plaintiffs, the difference between the pharmacy's U&C price and their negotiated rate paid to the pharmacy. The reported savings achieved by the PBM, therefore, look better when pharmacies submit artificially high U&C prices.

121. Second, PBMs can use “spread pricing” to increase their profits by charging TPPs more for prescription drug products than the PBMs reimburse pharmacies for the same prescription drugs.¹⁰¹ In simple terms, pass-through pricing is where the costs are more transparent to the PBM’s payer client and higher administrative fees are paid in lieu of spread pricing. For example, a PBM Agreement may say that the “Participating Pharmacy Reimbursement Rates” are the lower of AWP minus 16.5% or the U&C price, while not disclosing the fact that the actual pharmacy reimbursement rate specified in the PPA with a pharmacy is significantly less than the amount charged to the plan (*e.g.*, AWP minus 18.5%). The PBM keeps the difference. As brokers, PBMs’ income increases with the prescription drug price. Prescription drug claims based on low U&C prices reduce the amount PBMs can skim from TPP client up-charges through “spread pricing.”

122. Third, granting a concession allowing pharmacies to manipulate U&C can be used by the PBMs as leverage in negotiating other reimbursement terms to their favor. For example, PBMs know that it is relatively easy for their TPP clients to compare the pharmacy reimbursement terms (*i.e.*, drug cost reimbursement and dispensing fees) among competing bids for PBM services, so, to be competitive, PBMs strive to drive down the pharmacies' reimbursement as much as

¹⁰⁰ Erlund Dep. at 266:1-7.

¹⁰¹ Eban, Katherine, *Painful prescription: Prescription benefit managers make out better than their customers*, Fortune Magazine, Oct. 10, 2013 (“Generic prices are typically set through lists of maximum allowable costs (MAC), which the PBMs establish. The PBMs may use multiple MAC lists to maximize spread, giving one set of prices to pharmacies and another [set] to [their payer] clients.”).

possible. Pharmacies have very low margins already,¹⁰² but may be able to accept lower drug cost reimbursement and dispensing fees if they can augment revenue from this hidden source (*i.e.*, manipulating the U&C price), thus giving PBMs with lower reimbursement terms a competitive advantage.

123. Fourth, PBMs' charges for items, such as administrative fees, are easily comparable, but the financial benefits of allowing pharmacies to manipulate U&C pricing are not transparent to their TPP clients, such as Fund Plaintiffs.

124. Fifth, [REDACTED]

[REDACTED] 103

[REDACTED] 104

[REDACTED] 105

[REDACTED]. Walgreens then asserted that, because these "membership club" transactions were "adjudicated," they are not actually "cash transactions" (for which such prices must be included in the pharmacy's determination of the U&C price).

125. This manipulation of U&C pricing has resulted in litigation.

- a. CVS (which owns Caremark) – one of the largest PBMs – has identified¹⁰⁶ multiple entities that have initiated multiple actions against it for manipulating U&C pricing in a manner similar to Walgreens, including:
 - i. *Blue Cross & Blue Shield of Ala. v. CVS Health Corp.*, No. 1:20-cv-00236-WES (D.R.I.);
 - ii. *Washington v. CVS Pharmacy, Inc.*, No. 4:15-cv-03504-YGR (N.D. Cal.);
 - iii. *Humana Health Plan, Inc. v. CVS Pharmacy, Inc.*, AAA No. 01-19-0000-6924 (Am. Arb. Ass'n);

¹⁰² The average pharmacy's net profit was 2.1% of sales in 2018. National Community Pharmacists Association, *NCPA Digest* at 5 (2018), <http://www.ncpa.co/images/digest/2018-Digest-Web.pdf>.

¹⁰³ Reaves Dep. at 56:16-57:6.

¹⁰⁴ *Walgreens Co. / Express Scripts, Inc. Adjudication Agreement*, Feb. 2018, §3.1 (Walg_Forth_00321351).

¹⁰⁵ Amiet Dep. Ex. 87 (Email from Selina P. Coleman to Plaintiffs, Sept. 11, 2019).

¹⁰⁶ *In re Miss. Medicaid Usual & Customary Litig.*, No. 17CI1:17-cv-00028-CW, ECF 203-2 (Ex. 2 at 12-13) (Miss. Cir. Ct. Desoto Cnty. May 3, 2021).

- iv. *Sheet Metal Workers Loc. No. 20 Welfare and Benefit Fund v. CVS Health Corp.*, No. 1:16-cv-00046-WES (D.R.I.);
- v. *California ex rel. Omlansky v. CVS Caremark Corp.*, No. 34-2013-00147458-CU-FR-GDS (Cal. Super Ct., Sacramento Cnty.);
- vi. *Texas ex rel. Winkelman v. CVS Health Corp.*, No. D-1-GV-14000388 (Tex. Dist. Ct. Travis Cnty.); and
- vii. *United States ex rel. Winkelman v. CVS Caremark Corp.*, No. 1:11-11398-DJC (D. Mass.).

b. Similarly, Walgreens has identified¹⁰⁷ multiple entities that have initiated multiple actions against it for manipulating U&C pricing.

- i. *United States ex rel. Baker v. Walgreen Co.*, No. 1:12-cv-00300-JPO (S.D.N.Y.) (settled). This FCA matter alleged that Walgreens' pharmacies overcharged government healthcare programs by submitting its retail cash prices, instead of its PSC prices, as its U&C prices.
- ii. *United States ex rel. Harris v. Walgreen Co.*, No. 1:15-cv-08041-JPO (S.D.N.Y.) (dismissed). This FCA matter alleged the same allegations as the *Baker* case, was assigned to the same Judge in the S.D.N.Y., and was dismissed.
- iii. *Walgreen Co. v. Conn. Dep't of Soc. Servs.* (closed). On June 21, 2010, Walgreens petitioned the Connecticut Department of Social Services to issue a declaratory judgment to answer: (1) whether the prices charged to enrolled members of PSC constituted the U&C charge to the general public, as set forth by section 17-134d-81(b)(21) of the RCSA; and (2) whether the prices charged to enrolled members of PSC constituted Walgreens' U&C charges as defined by RCSA section 17b-262-685(30). The Department of Social Services concluded that Walgreens' PSC price was the U&C charge for purposes of submitting such charges to the Connecticut Medicaid program based on the RCSA sections outlined above.
- iv. *Cobbs v. Walgreen Co.*, No. 3:17-cv-01089-AJB-JLB (S.D. Cal.) (dismissed). This putative class action lawsuit alleged that Walgreens' pharmacies overcharged PBMs and customers by submitting its retail cash prices, instead of its PSC prices, as its U&C prices.
- v. *California ex rel. Omlansky v. Walgreens*, No. 34-2013-00147450-CU-FR-GDS (Cal. Super Ct. Sacramento Cnty.) (dismissed). This California FCA matter alleged that Walgreens' pharmacies overcharged Medi-Cal by submitting its retail cash prices, instead of its PSC prices, as its U&C prices.
- vi. *United States ex rel. Phillips v. Stephen L. LaFrance Holdings, Inc.*, No. 4:14-cv-00567-CVE-PJC (N.D. Okla.) (dismissed). This FCA case against pharmacy companies acquired by Walgreens in September 2012 alleged that the acquired pharmacies overcharged government healthcare programs

¹⁰⁷ *Miss. Medicaid* ECF 205-3 at 10-12.

for submitting their retail cash prices as their U&C prices instead of lower prices provided to customers who requested and received a competitive price match. The government declined to intervene in this matter, and it was dismissed pursuant to the first-to-file bar.

- vii. *United States ex rel. Strauser v. Stephen L. LaFrance Holdings, Inc.*, No. 4:18-cv-00673-GKF-SH (N.D. Okla.) (pending). This FCA case against pharmacy companies acquired by Walgreens in September 2012 alleged that the acquired pharmacies overcharged government healthcare programs for submitting their retail cash prices as their U&C prices instead of lower prices provided to customers who requested and received a competitive price match. The government declined intervening in this matter.
- viii. *Humana v. Walgreen Co.*, AAA No. 01-19-0002-5131 (Am. Arb. Ass'n) (arbitration award in favor of Humana). This arbitration alleges fraud and breach of contract claims against Walgreens related to Walgreens' submission of its retail cash prices, instead of its PSC prices, as its U&C prices.
- ix. *BCBSM, Inc. v. Walgreen Co.*, No. 1:20-cv-01853 (N.D. Ill.) (related cases at 1:20-cv-04738 (N.D. Ill.); 1:20-cv-03332 (N.D. Ill.); 1:20-cv-01929 (N.D. Ill.); 1:20-cv-04940 (N.D. Ill.)) (pending). This common law fraud and state deceptive trade practices matter, brought by several commercial health plans, alleges that Walgreens' pharmacies overcharged these commercial health plans by submitting its retail cash prices, instead of its PSC prices, as its U&C prices to the various health plans' PBMs.
- x. *Health Care Serv. Corp. v. Prime Therapeutics LLC*, No. 2021-L-000621 (Ill. Cir. Ct. Cook Cnty.) (pending). This suit involves an independent licensee of Blue Cross Blue Shield alleging fraud, fraudulent nondisclosure, unjust enrichment, and related claims against Walgreens that Walgreens had improperly reported its U&C prices as related to its PSC prices.
- c. Similarly, Rite Aid has identified¹⁰⁸ multiple entities that have initiated multiple actions against it for manipulating U&C pricing.
 - i. *Stafford v. Rite Aid Corp.*, No. 3:17-cv-01340-TWR-AHG (S.D. Cal.);
 - ii. *Josten v. Rite Aid Corp.*, No. 3:18-cv-00152-TWR-AHG (S.D. Cal.);
 - iii. *Rahimi ex rel. United States v. Rite Aid Corp.*, No. 2:11-cv-11940-SJM-MAR (E.D. Mich.);
 - iv. *Monmouth v. Rite Aid Corp.*, No. 2:20-cv-02024-MSG (E.D. Pa.);
 - v. *BCBS of N. C. v. Rite Aid Corp.*, No. 0:20-cv-01731-ECT-ECW (D. Minn.);
 - vi. *BCBS, Inc. v. Rite Aid Corp.*, No. 0:20-cv-02132-ECT-KMM (D. Minn.); and

¹⁰⁸ *Miss. Medicaid* ECF 217-2 at 18.

- vii. *Envolve Pharmacy Sols., Inc. vs. Rite Aid Hdqtrs. Corp.*, No. N19C-12-214 (Del. Super. Ct. New Castle Cnty.).
- viii. In addition, on April 25, 2022, an arbitrator in an individual action against Rite Aid brought by Humana – a single TPP – awarded approximately \$122 million in damages and prejudgment interest and found that Rite Aid’s Rx Savings Program prices – a functionally similar pharmacy discount program as the PSC – were cash prices. *Humana Health Plan, Inc. v. Rite Aid Hdqtrs. Corp.*, No. 3:22-cv-00226-DJH, ECF 1-1 at 23, 49 Opinion and Final Award (W.D. Ky. Apr. 25, 2022).

126. Finally, being complicit in pharmacies’ manipulation of U&C pricing does not cost Walgreens’ PBM partners anything; they could simply pass the added cost on to TPPs, such as Fund Plaintiffs, and insured customers, such as Individual Plaintiffs.

F. Walgreens Should Have Reported or Otherwise Included Its PSC Prices When Determining the U&C Prices to Report

127. Walgreens’ PSC prices represented cash prices available to the general public that should have been reported or included when determining the U&C prices to report. As discussed next, this is true for many reasons.

- a. Walgreens’ purpose in creating the PSC was to target cash customers. Walgreens advertised the PSC as offering “discounts” on “thousands” of generic medications filled at participating pharmacies.¹⁰⁹ The PSC’s marketing was aimed at the general public and not at any one subset of the population.
- b. The PSC is not a “club” in any meaningful sense. There were not any substantive requirements, restrictions, or limitations on who could participate in the “club” and receive PSC prices.
- c. [REDACTED]
- d. [REDACTED]
- e. [REDACTED]

110,111

112

¹⁰⁹ Complaint, Ex. A (PSC Plus).

¹¹⁰ Erlund Dep. at 15:17-16:14.

¹¹¹ Erlund Dep. Ex. 63.

¹¹² The terms “membership fee” and “enrollment fee” are used interchangeably in this report.

[REDACTED]
113

f. Despite acknowledging that the PSC was not insurance, Walgreens gave the PSC aspects of an insurance program to obscure that PSC prices were cash prices.

G. The PSC Is Open to Members of the General Public

128. The relevant inquiry for purposes of determining a pharmacy's U&C price is whether the price was *offered* or *available* to cash-paying customers. Walgreens' PSC was clearly offered and available to cash-paying members of the general public.

129. Walgreens repeatedly acknowledged that PSC membership was open to and targeted members of the general public. When asked who the “target audience or demographic” was for the PSC, Michael Amiet, Walgreens’ 30(b)(6) designee, testified: “Everyone, frankly.”¹¹⁴ Mr. Amiet further testified that “[t]he marketing wasn’t targeted to a particular subset of individuals,” and that the messaging regarding the PSC was “always around uninsured customers,” which is synonymous with cash-paying customers.¹¹⁵

130. In response to Plaintiffs’ Request for Admission No. 8,¹¹⁶ Walgreens stated that “[REDACTED]” This is consistent with Walgreens’ representation to the Inspector General of HHS that it intended the PSC program to be “[REDACTED].”¹¹⁷

131. [REDACTED]

118

132. There is no meaningful selectivity that separated Walgreens’ “membership club” customers from any other cash customers purchasing prescriptions without insurance. There were no restrictions on membership based on any type of demographic variable. The purported

¹¹³ “[REDACTED]” Walgreens’ Second Amended Objections and Responses to Plaintiffs’ Third Set of Interrogatories (Nov. 20, 2020), Response to Interrogatory No. 17.

¹¹⁴ Nov. 20, 2019 Deposition of Michael Amiet (“Amiet Dep.”) at 116:9-12.

¹¹⁵ *Id.* at 116:12-25.

¹¹⁶ Walgreens’ Response to Plaintiffs’ First Request for Admissions to Defendant (Feb. 28, 2020), Response to Request for Admission No. 8.

¹¹⁷ Schuler Dep. Ex. 169 (Walgreens’ letter to HHS Inspector General, Feb. 7, 2012) at 5968 (emphasis added).

¹¹⁸ Bernstein Dep. Ex. 44 (*Tips for Success*, CVS internal document).

“restrictions” associated with the membership programs were illusory, as no factual predicate exists to suggest that “club members” were anything other than members of the general public. Walgreens’ PSC was not a “club” in any meaningful sense. Michael Amiet, Walgreens’ 30(b)(6) designee, testified that the PSC had no officers or directors, no regular meetings, and provided no forum for purported “members” to communicate with one another.¹¹⁹ Sue Ewing, Walgreens’ former Vice President of Managed Care, Contracting, and Proposal Development, testified that she could not recall any gatherings of the PSC membership, any activities PSC members did together, or any common creed that PSC members shared.¹²⁰

133. The Seventh Circuit’s observation in *Garbe* that “[c]ash customers walking into Kmart **do not cease to be members of the general public the minute they are offered – or pushed into – ‘membership’** in Kmart’s ‘discount program’”¹²¹ accords with my understanding that membership clubs like Walgreens’ PSC are offered to members of the general public.

134. Similarly, I agree with the reasoning in *SuperValu* that it is “[t]he offer to the general public [that] determines the usual and customary price – not whether the offer was couched as a discount club or whether the majority of people accepted it.”¹²²

135. [REDACTED]

[REDACTED]
123

[REDACTED]
124

136. In response to Plaintiffs’ Request for Admission No. 71,¹²⁵ Walgreens claims that “[REDACTED]” because “[REDACTED]”

[REDACTED]
.”

[REDACTED]
126

¹¹⁹ Amiet Dep. at 91:13-14; 119:10.

¹²⁰ Ewing Dep. at 303:2-304:12.

¹²¹ *Garbe*, 824 F.3d at 643.

¹²² *United States v. SuperValu, Inc.*, No. 11-3290, 2019 WL 3558483, at *6 (C.D. Ill. Aug. 5, 2019).

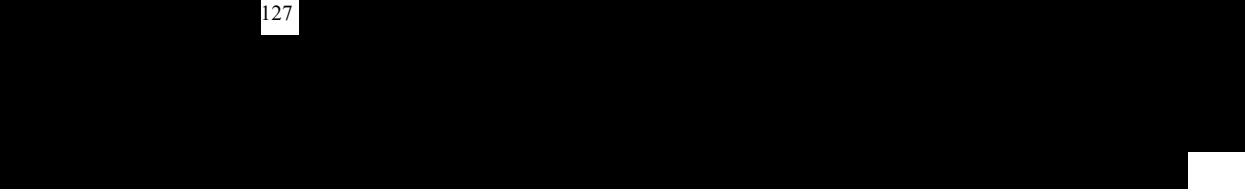
¹²³ Bernstein Dep. at 78-79.

¹²⁴ Amiet Dep. at 91:25-92:8; *see also* Schuler Dep. Ex. 169 at 5966.

¹²⁵ *See supra* n.8, Response to Request for Admission No. 71.

¹²⁶ Bernstein Dep. at 78-79.

[127]



1. PSC Customers Are Cash Customers

137. As indicated earlier in this report, there are two types of prescription transactions: (1) those paid at least in part by insurance; and (2) those paid by the customer without the use of insurance. The latter are known as “cash transactions” whether they are paid by currency, check, credit card, or on account – as long as there is no payment by insurance. Some cash transactions are discounted, and some are not – either way, they are still cash transactions.

138. In response to Plaintiffs’ Request for Admission No. 67,¹²⁸ Walgreens admitted that the PSC is “[REDACTED].” The PSC can thus only be a cash program.

139. Michael Amiet, Walgreens’ 30(b)(6) designee, testified that the purpose of the PSC was “to provide a different set of prices to the uninsured,” which is synonymous with cash paying customers.¹²⁹

140. In response to Plaintiffs’ Interrogatory No. 24,¹³⁰ Walgreens claims that the industry understanding of U&C is “[REDACTED].”

[REDACTED].”

141. Despite Walgreens’ claim, the long-standing industry understanding of U&C price equates “cash customers” with “customers paying without use of insurance.” As set forth in the following paragraphs, numerous industry representatives, including Walgreens officials, have confirmed this point:

- a. The definitive textbook on managed care pharmacy says that U&C price is “the cash price normally charged to patients who do not have prescription insurance coverage.”¹³¹

¹²⁷ Walgreens’ Second Amended Objections and Responses to Plaintiffs’ Third Set of Interrogatories (Nov. 20, 2020), Response to Interrogatory No. 21.

¹²⁸ *Supra* n.8, Response to Request for Admission No. 67.

¹²⁹ Amiet Dep. at 73:18-23.

¹³⁰ Walgreens’ First Amended Objections and Responses to Plaintiffs’ Fourth Set of Interrogatories (Nov. 20, 2020), Response to Interrogatory No. 24.

¹³¹ Kenneth W. Schafermeyer, ch. 16, *Impact of Managed Care on Pharmacy Practice*, in Navarro at 391.

- b. The GAO defined the “U&C price” as the price an individual without prescription drug coverage would pay at a retail pharmacy.¹³² A *U.S. Pharmacist* article quoting the GAO definition indicates that the “U&C rate is often referred to as the ‘cash price’ for patients.”¹³³
- c. Erica Reaves, Walgreens’ Director of Contracting and Pricing, agreed that “the cash price is the price that a pharmacy would charge to a customer who is not using insurance for the purchase of the prescription drugs.”¹³⁴
- d. Christi Piti, SavRx’s 30(b)(6) designee, testified: “
[REDACTED]
.”¹³⁵
- e. David Schroff, CastiaRx’s 30(b)(6) designee, testified that
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]¹³⁶
- f. David Halter, MedImpact’s 30(b)(6) designee, testified that
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]¹³⁷

142. Further, [REDACTED]
[REDACTED]¹³⁸

143. [REDACTED]
[REDACTED]
[REDACTED]¹³⁹

¹³² Government Accountability Office, “Prescription Drugs: Trends in Usual and Customary Prices for Commonly Used Drugs,” *GAO Reports* at 1 n.2 (Feb. 10, 2011), <https://www.gao.gov/assets/gao-11-306r.pdf>.

¹³³ Joey Mattingly, *Understanding Drug Pricing*, 37(6) *U.S. Pharmacist* 40 (June 20, 2012).

¹³⁴ Reaves Dep. at 64:12-16.

¹³⁵ Piti Dep. at 233:4-224:2.

¹³⁶ Schroff Dep. at 98:2-12; 250:2-6; 263:1-3.

¹³⁷ Halter Dep. at 159:6-12.

¹³⁸ Amiet Dep. Ex. 73 at 3486 (internal Walgreens slide set and notes titled “Pharmacy Pricing”) (emphasis added).

¹³⁹ Erlund Dep. at 17:10-17 & 66:16-23.

[REDACTED]¹⁴⁰ Sue Ewing, Walgreens' former Vice President of Managed Care, Contracting, and Proposal Development, agreed that Walgreens' contracting team – which negotiated rates with PBMs – and Walgreens' cash and PSC pricing teams were “siloed” and that: “There were different – you know, different approaches to that.”¹⁴¹

[REDACTED]¹⁴² When Walgreens

¹⁴³

144. Further, Walgreens' own documents [REDACTED]

¹⁴⁴

145. Michael Amiet, Walgreens' 30(b)(6) designee, testified that [REDACTED]

[REDACTED]¹⁴⁵ Mr. Amiet testified that Walgreens

[REDACTED]¹⁴⁶ In sum, Mr. Amiet

testified,

[REDACTED]¹⁴⁷

146. Walgreens' internal documents make clear that [REDACTED]

[REDACTED]^{148,149}

¹⁴⁰ Dec. 5, 2019 Deposition of Megan Butterfield (“Butterfield Dep.”) at 44:20-45:15; 79:7-20.

¹⁴¹ Ewing Dep. at 92:4-8.

¹⁴² Jan. 21, 2020 Deposition of Cindy Ip (“Ip Dep.”) at 157:5-13; 206:14-24 (“

[REDACTED]”).

¹⁴³ Erlund Dep. at 162:22-163:3 & 165:4-14.

¹⁴⁴ Erlund Dep. Ex. 69 at 2435.

¹⁴⁵ Amiet Dep. at 95:24-96:12.

¹⁴⁶ *Id.* at 96:13-21.

¹⁴⁷ *Id.* at 97:3-18.

¹⁴⁸ Erlund Dep. Ex. 69 at 2439.

¹⁴⁹ Erlund Dep. at 167:1-9.

[REDACTED] 150 [REDACTED]

: [REDACTED]

[REDACTED]

147. Consistent with these documents, to set its cash and PSC prices Walgreens conducted a [REDACTED] ¹⁵¹ Megan Butterfield, Walgreens' former Vice President of Market Access Analytics, testified that [REDACTED]

¹⁵² Ms. Butterfield further testified that [REDACTED]

[REDACTED] ¹⁵³ Initially, Walgreens employees, "the personnel in the store" would be the ones "actually making the phone calls and getting it – the information from the different competitors." ¹⁵⁴ [REDACTED]

¹⁵⁵ Ms. Butterfield testified that "

[REDACTED] . ¹⁵⁶

148. To allow Walgreens and its PBM partners to interpret the U&C price to mean any price that the pharmacy decides to report, whether an actual cash price or not, would render the term "U&C price" meaningless and negate Walgreens' obligation to apply the "lower of" provision when submitting third-party claims.

¹⁵⁰ Erlund Dep. Ex. 69 at 2439.

¹⁵¹ Erlund Dep. Ex. 65 at 1032 ("Pricing Overview," May 1, 2014).

¹⁵² Butterfield Dep. at 112:1-113:17.

¹⁵³ *Id.*

¹⁵⁴ *Id.* at 112:12-16.

¹⁵⁵ Erlund Dep. Ex. 65 at 1032 ("Pricing Overview," May 1, 2014).

¹⁵⁶ Butterfield Dep. at 114:3-10.

149. The U&C price, therefore, is not synonymous with an artificially-high headquarters-created price; it must reflect the cash prices that pharmacies are willing to accept for any given prescription drug. The U&C price, therefore, cannot be any arbitrary amount the pharmacy says it is – it must reflect discounted prices actually offered or made available to cash-paying customers (*i.e.*, those paying without using insurance).

150. In conclusion, the long-held industry understanding of U&C price is very simple – it is the lowest price that a pharmacy offers to a cash-paying customer (*i.e.*, a customer not using insurance) for a particular drug on a given day. PSC prices fit this description and are, indeed, cash prices.

2. The PSC’s Enrollment Fee Does Not Exclude PSC Prices from U&C, and the Savings Guarantee Undermines the Enrollment Fee

151. Walgreens set what I would consider to be a nominal “membership fee” in order to create a perceived “barrier to entry” for its “membership club.”

152. This fee was considered such a critical element that a document created by Jay Bernstein, Walgreens’ former Manager for Product Development and Innovation, warned Walgreens staff that *reductions in membership fees “would serve as a risk to the U&C prices,”*¹⁵⁷ and that *there should be [REDACTED]*.¹⁵⁸ Walgreens officials consistently represented the PSC enrollment fee as a “barrier to entry” required to differentiate PSC transactions from other cash prescription drug transactions, therefore allowing them to be excluded from U&C.

153. An internal Walgreens document indicated that the PSC discount prices [REDACTED]¹⁵⁹ Another document was more blunt, stating: “
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]”¹⁶⁰ The document continued: “
[REDACTED]
[REDACTED]
[REDACTED]”¹⁶¹

154. When asked at deposition “if there was no fee, then the price people would be paying for [PSC] drugs would be the cash price?” Mr. Bernstein testified: “Yeah. That’s what I would believe it to be. It is just like a cash customer that came in without an insurance plan.”¹⁶² Mr. Bernstein further testified that that even a reduction in membership fees “would serve as a risk

¹⁵⁷ Bernstein Dep. at 99:12-20 (emphasis added).

¹⁵⁸ Bernstein Dep. Ex. 35 (PSC Presentation).

¹⁵⁹ “
[REDACTED]
[REDACTED]
[REDACTED]” Erlund Dep. Ex. 69 at 2434 (emphasis added).

¹⁶⁰ Amiet Dep. Ex. 73 at 3499.

¹⁶¹ *Id.* at 3500.

¹⁶² Bernstein Dep. at 38:9-16.

to the U&C prices.”¹⁶³ Presumably, according to Walgreens’ own admissions, PSC prices could not be excluded from the determination of U&C prices if membership fees were waived or discounted.

155. Cade Erlund, former Manager of Pricing Strategy, similarly testified that he believes the membership fee is a barrier to entry that differentiates PSC prices from cash prices.¹⁶⁴

156. Erica Reaves, Walgreens’ Director of Contract Development, agreed that she felt that a membership fee was required for PSC discounts to be excluded from U&C.¹⁶⁵

157. Other industry players who opine that [REDACTED]

: [REDACTED]

- a. David Schroff, CastiaRx’s 30(b)(6) designee, [REDACTED]

[REDACTED].¹⁶⁶

- b. Brian Correia, Caremark’s 30(b)(6) designee, [REDACTED]

[REDACTED]¹⁶⁷

- c. David Halter, MedImpact’s 30(b)(6) designee, [REDACTED]

[REDACTED]¹⁶⁸

158. Nevertheless, [REDACTED]

[REDACTED]: [REDACTED]

- a. [REDACTED]

[REDACTED].¹⁶⁹

- b. [REDACTED]¹⁷⁰

¹⁶³ *Id.* at 99:12-20.

¹⁶⁴ Erlund Dep. at 117:4-20.

¹⁶⁵ Reaves Dep. at 83:21-84:6.

¹⁶⁶ Schroff Dep. at 91:17-20, 98:16-20.

¹⁶⁷ Correia Dep. at 113:22-114:3 (

[REDACTED]); see Correia Dep. Ex. 355 ([REDACTED]).

¹⁶⁸ Halter Dep. at 165:23-166:7.

¹⁶⁹ Q: “Would you agree that that type of reduction would serve as a risk to the U&C prices?” A: “In my opinion.” Bernstein Dep. at 99:1-20 and Bernstein Dep. Ex. 46 (January Renew and Grow the Base Campaign slideshow (Oct. 2012)).

¹⁷⁰ Bernstein Dep. at 50:24-51:11.

c. [REDACTED] 171

d. [REDACTED] 172

e. [REDACTED] 173,174

159. [REDACTED]

175,176

160. When asked at deposition whether the savings guarantee was meant “to give the consumer confidence that in practice there was no financial risk for paying the \$20 enrollment fee,” James Devine, a former product manager for the PSC, testified: “Yes,” because a “guarantee is a guarantee.”¹⁷⁷

161. Walgreens’ use of the savings guarantee and other means of reducing or eliminating the PSC enrollment fee effectively negates Walgreens’ claims that this fee serves as a “barrier to entry” and makes it clear that “club members” were no different than other members of the general public.

171 [REDACTED]

Bernstein Dep. at 53:12-54:8.

¹⁷² Bernstein Dep. Ex. 43 (Undated letter to PSC Members).

173 [REDACTED]

[REDACTED] *See* Erlund Dep. Ex. 64 at 2535 (Walgreens’ PSC Value-Priced Medication List).

¹⁷⁴ Q: “Walgreens offered a savings guarantee, right, as part of the PSC program?” A: “Later on, I believe, yes.” Q: “And that guarantee basically would provide customers a refund of a portion or all of the fee if it wasn’t offset by the savings they got through the program, right?” A: “I believe that to be correct.” Bernstein Dep. at 90:12-24.

¹⁷⁵ Bernstein Dep. Ex. 35.

176 [REDACTED]

[REDACTED] Bernstein Dep. at 101:12-19.

¹⁷⁷ July 14, 2020 Deposition of James Devine (“Devine Dep.”) at 125:8-19.

3. The PSC Terms and Conditions Do Not Take PSC Out of the Ambit of U&C

162. To participate in the PSC program, customers are asked to enroll and agree to the terms and conditions.¹⁷⁸

163. The terms and conditions cover issues such as copyright/trademarks, cancellation, privacy, mobile applications and disclaimers, such as correct pricing not being guaranteed.

164. Nothing in these terms and conditions gives any indication that the discounts offered are for anyone other than cash customers.

165. Nothing in these terms and conditions addresses the fact that the PSC prices would or would not be submitted to insurance companies as Walgreens' usual and customary price.

166. The demographic information requested to sign up is nothing more than what would already be in Walgreens' records for prescription customers.

167. An individual is allowed to enroll family members (and pets) without their assent. These individuals can participate without agreeing to the "terms and conditions."

168. I have seen no evidence that there is anything in the PSC discount program terms and conditions that takes it out of the ambit of usual and customary.

4. PSC Transactions Are Not Actually Adjudicated, and, in Any Event, Whether or Not a Prescription Is Adjudicated Does Not Impact Whether the Price Offered Should Be Reported as U&C

169. Walgreens' PSC claims were not adjudicated in any meaningful sense similar to how claims for insured prescription drug claims are adjudicated. The PSC involves no actual insurance company and the "membership club" plan was simply a Walgreens discount program for cash customers.

170. In the pharmaceutical industry, "adjudication" describes a process of making decisions or judgments on insurance claims. These decisions involve issues such as the following:

- a. Determining customer eligibility based on information unknown to the pharmacy staff;
- b. Determining prescription coverage based on information unknown to the pharmacy staff;
- c. Determining payment based on the "lesser-of" or "lower-of" logic;
- d. Subjecting the prescription information to various administrative edits (e.g., refill too soon or refill not authorized); and

¹⁷⁸ See Walgreen Prescription Savings Club, <https://www.walgreens.com/psc/prescription-savings-club> (last accessed Nov. 8, 2022).

e. Subjecting the prescription information to various safety edits (e.g., contraindications, drug interactions, DUR, or prior authorization requirements).

171. The primary difference between a PSC prescription and other cash prescription transactions is that Walgreens [REDACTED]

[REDACTED] 179 [REDACTED]

[REDACTED]. But this is only an illusion designed to protect Walgreens' U&C.¹⁸⁰

172. That the adjudication of PSC claims was a ruse to protect Walgreens' U&C is further evidenced by the fact that the program was [REDACTED]

[REDACTED] 181 [REDACTED]

[REDACTED] 183 [REDACTED]

173. This so-called "adjudication" is not necessary; pharmacies are capable of processing their own discounts. The PSC program is essentially a discount program for cash customers – *i.e.*, those not using an insurance benefit. Discounts, including those for senior citizens, employees, first responders, health professionals and others, can be offered without establishing a "membership club" and having the discount processed by an outside administrator.

174. Michael Amiet, Walgreens' 30(b)(6) designee, testified that it was [REDACTED]

[REDACTED] 184 [REDACTED]

¹⁷⁹ Specifically, the BIN number, along with a Processor Control Number and Group Number, is "used by pharmacies, switches, and processors to electronically route and adjudicate pharmacy claims for prescriptions ***and typically identify pharmacy insurance programs.***" See NCPDP, "Recommendations for Use of the NCPDP Telecommunication Standard to Prevent Use of Copayment Coupons by Medicare Part D Beneficiaries and Applicability to other Federal Programs, Version 1.1" (May 2017), <https://ncpdp.org/NCPDP/media/pdf/WhitePaper/Recommendations-Telecomm-Standard-Prevent-Copayment-Coupons-by-Part-D.pdf?ext=.pdf> (last accessed Nov. 8, 2022) (emphasis added).

¹⁸⁰ [REDACTED]

[REDACTED] Bernstein Dep. at 56:22-58:7.

¹⁸¹ Erlund Dep. Ex. 63 at 2133.

¹⁸² Bernstein Dep. at 109:3-13.

¹⁸³ Reaves Dep. at 56:1-57:6.

¹⁸⁴ Amiet Dep. at 257:12-19.

175. This testimony, however, is contradicted by other Walgreens employees who testified that they disagreed that PSC was like third-party insurance. Sue Ewing, Walgreens' former Vice President of Managed Care, Contracting, and Proposal Development, testified that PSC was "completely different" from third-party insurance or discount cards because: "It was a product we owned. It was a product we offered. It was not a contractual relationship."¹⁸⁵ Megan Butterfield [REDACTED]

[REDACTED]¹⁸⁶ Erica Reaves, Walgreens' Director of Contract Development, also agreed by acknowledging that PSC transactions were not insurance claims despite the fact that they were handled as if they were.¹⁸⁷

176. Further, unlike third-party insurance, Walgreens – not any other entity – had control over PSC prices. C [REDACTED]

¹⁸⁸ [REDACTED]

[REDACTED]¹⁸⁹

177. [REDACTED]

[REDACTED]¹⁹⁰

178. I agree with *Garbe*'s statement that this so-called "adjudication" is a "flimsy device" that frustrates the usual and customary requirement and is "a sham."¹⁹¹

179. Although Walgreens designed the PSC to appear as if it were offering purportedly discounted prescription drugs to "members" of some type of exclusive "club," none of Walgreens' efforts alter the conclusion that its PSC prices were, in fact, cash prices. Through the PSC, Walgreens routinely offered discounts to cash customers, but these prices were denied to TPPs and their insured beneficiaries because Walgreens failed to report or otherwise include its PSC prices when determining the U&C price to report for PSC drugs.¹⁹² In other words, Walgreens offered

¹⁸⁵ Ewing Dep. at 104:4-14.

¹⁸⁶ Butterfield Dep. at 80:12-81:1.

¹⁸⁷ Reaves Dep. at 55:7-19.

¹⁸⁸ Amiet Dep. Ex. 75 at 0290 (Walgreens/Catalyst Amended and Restated Ancillary Services Agreement (Jun. 13, 2011)) (emphasis added).

¹⁸⁹ Declaration of Bill McLaughlin of Express Scripts, Inc., ¶9, *Forth v. Walgreen Co.*, Case No. 1:17-cv-02246-JZL (N.D. Ill. Oct. 22, 2020).

¹⁹⁰ *Walgreens Co. / Express Scripts, Inc. Adjudication Agreement*, Feb. 2018, §3.1 (Walg_Forth_00321351).

¹⁹¹ *Garbe*, 824 F.3d at 636, 645.

¹⁹² Q: "To your knowledge, did Walgreen's ever report its PSC prices as its usual and customary prices?" A: "Not to my knowledge." Erlund Dep. at 26:17-20.

low prices to discount-program cash customers, while improperly reporting higher prices falsely represented as its U&C price.

H. Walgreens' Failure to Report or Otherwise Include Its PSC Prices When Determining the U&C Price to Report Has Not Met the Reasonable Expectations of Consumers and TPPs, Depriving Them of the Benefits of Their Insurance Coverage

180. Insured beneficiaries, such as Individual Plaintiffs and IBEW, IUOE, and Steamfitters' beneficiaries, were entitled by their insurance membership to assurance that copayments would not exceed the PSC price. These insured beneficiaries should not have been required to pay a fee to get the lower prices offered to other members of the general public.

181. Consequently, membership fees should not have to be paid by members of the IBEW, IUOE, and Steamfitters plans to Walgreens to receive the full benefit of their insurance.

182. Similarly, insured consumers and TPPs should not have been forced to choose between receiving the PSC cash prices to which they were entitled, and the benefits provided through insurance. Walgreens' failure to report or otherwise include its PSC prices when determining the U&C prices to report rendered it disadvantageous for insured customers to use their insurance, rather than purchase through membership program prices – raising potential safety issues as well as undercutting the economics of insurance.

183. With regard to the safety issue, processing claims through a beneficiary's third-party insurance helps facilitate performance of important online prospective DUR functions. DURs conducted as part of the claims adjudication system evaluate the appropriateness of a patient's medications with a goal of promoting optimal therapy and positive outcomes. Sue Ewing, Walgreens' former Vice President of Managed Care, Contracting, and Proposal Development, testified that DUR helps "ensure that there's not [an] overdose" or "contradictions with maybe other drugs" to help determine if it's "clinically appropriate and safe for the patient to be taking" a given drug.¹⁹³ The third-party's online prospective DUR function supplements individual pharmacies' internal DUR systems and often provides valuable information preventing problems such as drug interactions, duplicate therapy and overutilization that the pharmacy would be unable to detect otherwise. TPPs require pharmacies to check an insurance plan member's medication history for potentially dangerous problems such as drug interactions and overutilization prospectively (*i.e.*, before dispensing the prescription). While pharmacies are able to check medication histories and perform DUR for patients who patronize that pharmacy exclusively, these histories are incomplete if the patient does not use their insurance benefit to purchase prescription drugs.

184. When claims are processed as cash, and not submitted to the insurance plan member's PBM or sponsor, such as when drugs are purchased through the PSC, the beneficiaries' complete DUR history is not able to be properly checked and the current information is not properly recorded to the beneficiaries' medical history for later reference. As a consequence, subsequent pharmacists seeking to review the patient's DUR history and medical record could be

¹⁹³ Ewing Dep. at 30:6-17.

dangerously misled into believing that the patient's DUR medical record was properly recorded and complete when dispensing subsequent prescriptions.

185. For example, Brian Correia, Caremark's 30(b)(6) designee, [REDACTED]

[REDACTED]
,194

[REDACTED]
,195

[REDACTED]
,196

186. I thus find that Walgreens' failure to report or otherwise include its PSC prices when determining the U&C price to report: (1) has not met the reasonable expectations of TPPs and insured beneficiaries; and (2) has deprived both insured beneficiaries of the benefits of their insurance coverage and TPPs of the cost-savings insurance is meant to provide.

VI. CONCLUSION

187. The U&C price is generally understood in the pharmaceutical industry as the amount the pharmacy charges to customers paying without insurance, inclusive of discounts. Walgreens' PSC prices are offered to the "general public," as they are available to all individuals who pay without using insurance, with only nominal, if any, cost or burden.

188. Based on my professional experience and education, as well as my examination of various documents, it is my opinion that Walgreens' PSC prices are offered to the general public, and therefore, because they are cash prices, Walgreens should have reported or included its PSC prices when determining the U&C price to report for PSC drugs.

189. The practice of reporting cash prices available to the general public as the pharmacy's U&C price is generally understood as standard practice in the pharmaceutical industry. As such, Walgreens should have reported or otherwise included its PSC prices when determining the U&C price reported to report for PSC drugs. Walgreens' failure to report or otherwise include its lower cash PSC prices when determining the U&C price to report undermines the purpose of the "lower of" standard and perversely results in insured prescriptions costing more than prescriptions not covered by insurance.

190. The industry understanding of U&C pricing contemplates that whenever a pharmacy offers a price to its customers paying without insurance, TPPs and their insured beneficiaries receive the benefit of that offer. TPPs and their insured beneficiaries should not pay more for a given prescription than what a cash-paying customer not using insurance pays for the prescription. The failure to report or otherwise include PSC prices when determining the U&C price to report causes TPPs and their insured beneficiaries, such as Plaintiffs and the Class, to overpay for prescription drugs.

191. From my knowledge, experience, and examination of this issue, I have concluded that Walgreens' PSC was contrived for the purpose of competing with other pharmacies' discount prices, while concealing Walgreens' actual U&C prices and improperly obtaining overpayments

¹⁹⁴ Correia Dep. at 307:14-19.

¹⁹⁵ *Id.* at 307:20-308:2.

¹⁹⁶ *Id.* at 308:3-9.

from TPPs and their insured beneficiaries to retain a higher profit margin on insured transactions. That PBMs may not have sufficiently challenged Walgreens' U&C reporting practices is consistent with the financial interests of both the PBMs and Walgreens, at the expense of TPPs and their insured beneficiaries, like Plaintiffs and the Class.

I declare, under penalty of perjury, that the foregoing is true and correct to the best of my knowledge and ability.

Dated: November 16, 2022



Kenneth W. Schafermeyer, Ph.D.

EXHIBIT A

Curriculum Vitae
of
KENNETH W. SCHAFERMEYER

Professor Emeritus
University of Health Sciences and Pharmacy in St. Louis*
One Pharmacy Place
St. Louis, MO 63110
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Ken.Schafermeyer@uhsp.edu

* (Please note the institution's name changed from St. Louis College of Pharmacy to the University of Health Sciences and Pharmacy in St. Louis in September 2020. As a college within the University structure, St. Louis College of Pharmacy remains home to UHSP's flagship Doctor of Pharmacy program.)

ACADEMIC INTERESTS

- **Teaching:** Economics, Pharmacy Management, Financial Management and Managed Health Care.
- **Research and Consultation:** Health economics, health systems management, financial analysis of pharmacy operations, Medicaid and managed care prescription programs, public policy issues related to medication usage and optimizing use of pharmacy technical support.

EDUCATION

1990	Doctor of Philosophy in Pharmacy Administration, School of Pharmacy and Pharmacal Sciences, Purdue University, West Lafayette, Indiana.
1983-1987	School of Business, Washburn University, Topeka, Kansas (36 credit hours of business, economics and marketing).
1979	Master of Science in Pharmacy Administration, School of Pharmacy, University of Tennessee, Memphis, Tennessee.
1976	Bachelor of Science in Pharmacy, St. Louis College of Pharmacy, St. Louis, Missouri.

LICENSURE AND CERTIFICATION

- Currently licensed as a pharmacist by examination in Missouri (1976) and formerly licensed by reciprocity in Tennessee (1978) and Virginia (1979).
- Designated as a "Certified Association Executive" by the American Society of Association Executives (1981).

EMPLOYMENT HISTORY

2022 –	Professor Emeritus, St. Louis College of Pharmacy at University of Health Sciences and Pharmacy
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2012 - 2022 Professor of Pharmacy Administration and Director, Office of International Programs, St. Louis College of Pharmacy at University of Health Sciences and Pharmacy in St. Louis.

2007-2012 Professor of Pharmacy Administration and Director, Liberal Arts and Administrative Sciences Division, St. Louis College of Pharmacy.

2001-2007 Professor of Pharmacy Administration and Director of Graduate Studies, St. Louis College of Pharmacy.

2002-2003 Senior Fellow, Institute for the Advancement of Community Pharmacy (sabbatical assignment July 1, 2002 to June 30, 2003).

1996-2001 Associate Professor of Pharmacy Administration and Director of Graduate Studies, St. Louis College of Pharmacy.

1995-1996 Associate Professor of Pharmacy Administration, St. Louis College of Pharmacy.

1990-1995 Assistant Professor of Pharmacy Administration, St. Louis College of Pharmacy.

1988-1990 Graduate Teaching Assistant and Research Assistant, Purdue University School of Pharmacy and Pharmacal Sciences.

1982-1987 Executive Director, Kansas Pharmacists Association;
Executive Director, Kansas Pharmacy Foundation;
Executive Vice President, Kansas Society of Hospital Pharmacists; and
Executive Director, Kansas Pharmacy Service Corporation.

1979-1982 Executive Director, Virginia Pharmaceutical Association; and
Executive Director, Virginia Pharmaceutical Association Research and Education Foundation.

1978-1979 Assistant Executive Director, American College of Apothecaries;
Graduate Teaching Assistant, University of Tennessee School of Pharmacy;
Staff Pharmacist, White Way Drug, Memphis, Tennessee; and
Relief Pharmacist, various pharmacies in Memphis, Tennessee.

1976-1978 Director of Professional Relations, Missouri Foundation for Pharmaceutical Care;
Staff Pharmacist, Kirkwood Drug, Kirkwood, Missouri; and
Relief Pharmacist, various pharmacies in the St. Louis area.

1973-1976 Pharmacy Intern, Glasgow Pharmacy, St. Louis, Missouri.

ASSOCIATION MEMBERSHIPS

Academy of Managed Care Pharmacy (1994--2014)
American Association of Colleges of Pharmacy (1990-2022)
American College of Apothecaries (1978-87)
American Pharmacists' Association (1973-2022)
American Society of Association Executives (1979-88)
American Society of Hospital Pharmacists (1988-93)

Consortium of Universities for Global Health (2016-2022)
Indiana Pharmacists' Association (1988-1990)
International Pharmacy Federation
International Society for Pharmacoeconomics and Outcomes Research (1995-2001)
Kansas Pharmacists' Association (Honorary Life Member)
Kansas Society of Association Executives (1982-88)
Lambda Chi Alpha Fraternity
Missouri Pharmacy Association
NAFSA: Association of International Educators (2013-2021)
National Community Pharmacists' Association (~1992-2022)
National Council of State Pharmaceutical Association Executives (1979-88)
National Organization for Competency Assessment (2006-09)
Phi Lambda Sigma Pharmacy Leadership Society
Rho Chi Pharmacy Honor Society
St. Louis Pharmacists' Association (1991-2008)
St. Louis College of Pharmacy Mortar and Pestle Club
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Pieper JA, Lukas S, Craig B, Gleason BL, Schafermeyer KW, Sass M and Flabiano H, "Development of Bachelor and Master Degree Programs in Global Health." Poster at the Tenth Biennial Monash Pharmacy Education Symposium, Prado, Italy, September, 2019.

Lukas S, Ryan RR, Peters, GL, Tiemeier AM and Schafermeyer KW, "Global Outreach at St. Louis College of Pharmacy." Poster at American Association of Colleges of Pharmacy Annual Meeting, Chicago, IL, July 14, 2019.

Collins AN, Oginni O, and Schafermeyer KW, "Employment Survey of the 2018 Graduates of St. Louis College of Pharmacy." Poster at STLCOP Student Research Symposium, April 2019.

Lukas SK, Peters GL, Joshi M and Schafermeyer KW, "Use of Work Plans to Guide Collaboration Between United States and India Schools of Pharmacy." Poster at Consortium of Universities for Global Health Conference, Chicago, IL, March 2019.

Peters GL, Joshi M, Lukas S, Vaidya R, and Schafermeyer KW, "Enhancing Over-the-Counter Medication Knowledge for Pharmacists in Goa, India. Poster at American College of Clinical Pharmacy International Conference, Seattle, WA, October 22, 2018.

Schafermeyer KW, "Transforming Outcomes: the Pharmabridge Experience." International Pharmacy Federation Annual Meeting, Glasgow, Scotland, September, 2018.

Lukas SK and Schafermeyer KW, "Preparing Students for International Experiential Education." Poster at International Pharmacy Federation Annual Meeting, Glasgow, Scotland, September 2018.

Russell MB, Collins AN, and Schafermeyer KW, "Employment Survey of the 2017 Graduates of St. Louis College of Pharmacy." STLCOP Student Research Symposium, April 2018.

Lukas SK, Boschmans SA, Fogarty TL and Schafermeyer KW, "Collaboration for the Training of Pharmacy Technicians in South Africa." Poster presented at Midwest Universities for Global Health Meeting, St. Louis, MO, December 1, 2017.

Schafermeyer KW and Lukas SK, "Managing Risk in Global Health Programs." Poster presented at Midwest Universities for Global Health Meeting, St. Louis, MO, December 1, 2017.

Schafermeyer KW (panelist) "Faculty Professional Development in Global Health. Midwest Universities for Global Health Meeting, St. Louis, MO, December 1, 2017.

Schafermeyer KW, "Global Engagement Opportunities for Students and Alumni." STLCOP Alumni Association, November 16, 2017.

Lukas SK and Schafermeyer KW, "Pharmacy Technicians: A Multi-Faceted Approach to Developing a New Cadre of Pharmacy Support Personnel in South Africa." Presentation at the International Pharmacy Federation World Congress of Pharmacy and Pharmaceutical Sciences, Seoul, South Korea, September 2017.

Lukas SK and Schafermeyer KW, "Planning and Executing a Service Learning Course." Roundtable session at the American Association of Colleges of Pharmacy Annual Meeting, Nashville, TN, July 17, 2017.

Schafermeyer KW and Lukas SK, "Drug Abuse: An International Perspective." Presentation to the International Students Organization and Students Organization for Drug and Alcohol Awareness, St. Louis College of Pharmacy, April 6, 2017.

Malotra J, Schafermeyer KW and Williams D, "Training Opportunities and Experiences for Hosting Global Pharmacist Colleagues." Webinar hosted by the American Association of Colleges of Pharmacy, December 15, 2016.

Schafermeyer KW and Lukas SK, "Participating in the International Pharmacy Federation's Pharmabridge Program." Presented at the Strategies for New Opportunities Worldwide (SNOW) Conference, Denver, CO, December 10, 2016.

Lukas SK and Schafermeyer KW, "Pharmacy Capacity Building – Comparison of Programs in Africa." Presentation at the Strategies for New Opportunities Worldwide (SNOW) Conference, Denver, CO, December 10, 2016.

Schafermeyer KW and Lukas SK, "Managing Risk in Study Abroad and International Service Programs." Poster presented at the Strategies for New Opportunities Worldwide (SNOW) Conference, Denver, CO, December 10, 2016.

Lukas SK and Schafermeyer KW, "New Directions for Addressing the HIV/AIDS Crisis in Southern Africa." Presentation to the Student National Pharmacists Association STLCOP Chapter, December 1, 2016.

Boschmans SA, Fogarty TL, Schafermeyer KW, Lukas SK and Mallinson RK, "Pharmacy Technician Training in South Africa: Improving Access to Antiretrovirals." Presentation to the Board of Directors of the American International Health Alliance, Washington, DC, September 27, 2016 and webinar hosted by the U.S. Department of Health and Human Services, Health Resources Services Administration, Rockville, MD, September 28, 2016.

Schafermeyer KW, "Hospital Formulary Management and Decision Making." Beijing Pharmaceutical Association, Beijing, China, September 9, 2016.

Schafermeyer KW, "The Pharmacoeconomic Basis for Hospital Formulary Management." First People's Hospital of Yunnan Province, Kunming, China, September 7, 2016

Lukas SK, Peters GL, Mezgebe HB, and Schafermeyer KW, "U.S. and Ethiopian Schools of Pharmacy Partner to Enhance Pharmacy Education." Poster presented at the International Pharmacy Federation Annual Meeting, Buenos Aires, Argentina, September 1, 2016.

Schafermeyer KW, "Pharmacoconomics Review," Board of Pharmaceutical Specialties Review Course, St. Louis College of Pharmacy, August 18, 2016.

Schafermeyer KW and Lukas SL, "Internationalization of Pharmacy Education." Presentation at Rhodes University, Grahamstown, South Africa, July 13, 2016.

Lukas SK, Fogarty TL, Boschmans, SA, Tiemeier A, Mallinson RK, and Schafermeyer KW, "Pharmacy Technicians: Improving Access to Antiretrovirals and Other Medications in South Africa." Poster presentation at the Global Health and Infectious Disease Conference, Washington University in St. Louis, April 2016.

Russell MB, Collins AN, and Schafermeyer KW, "Employment Survey of the 2016 Graduates of St. Louis College of Pharmacy." Poster presented at the STLCOP Student Research Symposium, April 8, 2017.

Schafermeyer KW, "Global Perspective on HIV/AIDS." Presentation Schafermeyer KW, "Global Health Economics." Presentation to the National Student Pharmacists Association, St. Louis College of Pharmacy, December 1, 2015.

Griggs SK, Schafermeyer KW, Hanks C, and Park T, "Baseline Factors Related to Cultural Competence among Pharmacy Students at a Midwestern College in the United States." Poster presented at the International Pharmacy Federation Annual Meeting, Dusseldorf, Germany, October 1, 2015.

Griggs SK, Patterson ME, Schafermeyer KW, Liu Y, Brown WN and Rasu RS, "An Analysis of the Cost of Dispensing Prescriptions in Missouri." Poster presentation at the Midwest Pharmacy Conference and Expo, Overland Park, KS, September 13, 2015.

Schafermeyer, KW, "Group Purchasing Organizations: Applying Lessons Learned in the U.S. to Pharmaceutical Purchasing in China." Presentation to Beijing Hospital Pharmacists Association and Peking Union Medical College Hospital, Beijing, China, September 7, 2015.

Schafermeyer KW, "Fundamentals of Exam Psychometrics" Blueprint, Exam Construction and Item Analysis." Presentation at Nelson Mandela Metropolitan University, Port Elizabeth, South Africa, June, 2015.

Schafermeyer KW, "Global Health Economics." Presentation to the Washington University School of Medicine, Global Health Scholars Lecture Series, St. Louis, MO, May 11, 2015.

Duong N, Pham E, Huber A, Cho S, Griggs SK, Schafermeyer KW and Park T, "Ongoing Assessment of Cultural Competence among St. Louis College of Pharmacy Students: Baseline and Longitudinal Data." Poster presentation at the STLCOP Student Research Symposium, April 18, 2015.

Scimio C, Thomas M, and Schafermeyer KW, "Employment Survey of the 2014 Graduates of St. Louis College of Pharmacy." Poster presentation at the STLCOP Student Research Symposium, April 18, 2015.

Franco FM, Plaster A, Patel R and Schafermeyer KW, "Harmful Prescribing Practices and Medication Use among Pregnant Women and Children in the Flooded Regions of Northeast Bangladesh: Implications for a Teaching Program." Poster presented at Washington University School of Medicine, Third Annual Global Health and Infectious Disease Conference, St. Louis, MO, April 9-10, 2015.

Owens L, Stoner C and Schafermeyer KW, "Pharmacy Students Train Healthcare Workers in Swaziland." Poster presented at Washington University School of Medicine, Third Annual Global Health and Infectious Disease Conference, St. Louis, MO, April 9-10, 2015.

Schafermeyer KW, "Evolution of Health Care and Health Insurance: Impact on Hospital Pharmacies." Presentation to the Beijing Pharmaceutical Association Annual Meeting, Beijing, China, December 20, 2014.

Schafermeyer KW, "Economic Trends in Health Care: Impact on Us Pharmacies." Presentation to Eastern Asia University, Bangkok, Thailand, September 2014.

Schafermeyer KW, "Preparation and Implementation of an International Pharmacy School Collaboration." Presentation at the International Pharmacy Federation Annual Meeting, Bangkok, Thailand, September 2014.

Schafermeyer KW, "Impact of Economic Trends in Health Care: A Comparison of the U.S. and India." Presentation to the Goa, India Pharmacy Council, Panaji, India, September 2014.

Lee SY, Griggs SK and Schafermeyer KW, "An Assessment of Cultural Competence among Pharmacy Students." Poster for American Association of Colleges of Pharmacy Annual Meeting, Grapevine, TX, July 2014.

Scimio KN, Cho S, Powell J, Griggs SK, Lee SY and Schafermeyer KW, "An Initial Assessment of Cultural Competence Among St. Louis College of Pharmacy Students." Poster for STLCOP Student Research Symposium, April 2014.

Berry TM, Griggs SK, McMurphy T, Pearce EF, Peters G, Schafermeyer KW, Simmons KL, Tiemeier AM, "From the College Community to International Partnerships: The Ripple Effect of STLCOP Community Engagement." Poster for American Association of Colleges of Pharmacy Annual Meeting, Grapevine, TX, 2014.

Panelist, "Research: How Do I Get Started," STLCOP Student Research Symposium, April 2014.

Panelist, "Missouri Pharmacy Association Pre-Legislative Day Expert Panel," St. Louis College of Pharmacy, March 25, 2014.

Schafermeyer KW, "Cultural Competence and International Service for Pharmacy Students," presentation at the Veteran Pharmacists Group of the STLCOP Alumni Association, April 24, 2014.

Peters GL, Lee SY and Schafermeyer KW, "A Collaborative Effort to Develop Clinical Pharmacy Services and Advanced Pharmacy Practice Experience (APPE) Student Exchange Programs in Ethiopia and China." Poster presentation at the American College for Clinical

Pharmacy Annual Meeting, Albuquerque, NM October 2013. Abstracted in *Pharmacotherapy* 2013; 33(10)e182-e299. Abstract #254.

Schafermeyer KW, "To Error is Human: Strategies for Decreasing Medication Errors." Presentation to medical and nursing staff at Raleigh Fitkin Memorial Hospital, Manzini Swaziland, June 14, 2013.

Schafermeyer KW, "STLCOP Office of International Programs," St. Louis College of Pharmacy Alumni Association Annual Meeting, May 16, 2013

Scimio KN and Schafermeyer KW, "A Study of Gender Differences in Employment of Recent Pharmacy Graduates." Poster presentation at the International Pharmacy Federation Annual Meeting, Amsterdam, Netherlands, October 5, 2012.

Schafermeyer KW, "Health Care Reform: Myths vs. Realities." St. Louis College of Pharmacy Alumni Association, St. Louis, MO, September 29, 2012.

Schafermeyer KW, Health Care Reform: Impact on Pharmacy, McKesson Regional Meeting, St. Louis, MO, November 10, 2010.

Schafermeyer KW, Marshal P and Konieczny N, "Health Care Reform: Facts vs. Myths." St. Louis College of Pharmacy Alumni Association, St. Louis, MO, November 4, 2010.

Schnur ES and Schafermeyer KW, "The Importance and Level of Coverage of Practice Management in a Pharmacy Curriculum," Poster, International Pharmacy Federation Annual Meeting, Lisbon Portugal, August 30, 2010.

Schafermeyer KW, "Job Enrichment: How to Enhance Your Job as a Pharmacy Technician," Missouri Pharmacy Association Annual Meeting, Branson, MO, June 11, 2010.

Schafermeyer KW, "On-the-Job Training for Pharmacy Technicians," National Community Pharmacists Association Annual Meeting, New Orleans, LA, October 19, 2009.

Schafermeyer KW and Tadrus C, "One Size Does Not Fit All: A Focus on Pharmacy Technician Training and Certification Programs in the Community Setting," National Community Pharmacists Association Annual Meeting, Tampa, FL, October 12, 2008.

Schafermeyer, KW, "Managing Your Boss and Managing Your Career," Missouri Pharmacy Association Annual Meeting, St. Louis, MO, June 13, 2008.

Schafermeyer KW, "Pharmacy Staffing: Optimizing the Use of Pharmacists and Technicians," Missouri Pharmacy Association Winter Meeting, Branson, MO, February 10, 2008.

Schafermeyer KW, "The Role of Pharmacy Benefit Managers," Southern Illinois University College of Pharmacy, Edwardsville, IL, November 10, 2006.

Schafermeyer KW, "Enhancing Your Career as a Pharmacy Technician," National Pharmacy Technician Association Annual Meeting, St. Louis, MO, August, 2006.

Schafermeyer KW, "Assessment of Pharmacy Technician Skills" National Community Pharmacists Association Annual Meeting, Las Vegas, NV, October 11, 2006.

Schafermeyer KW, "Enhancing Your Career as a Pharmacy Technician," Oregon State Pharmacy Association Annual Meeting, Salem, OR, September 16, 2006.

Schafermeyer KW, "Pharmacy Benefit Management Companies" Health Care Systems Course at Southern Illinois University – Edwardsville, November 2006.

Schafermeyer KW, "Pharmacy Technician Education and Training: A Need to Standardize?" at National Association of Boards of Pharmacy Educational Conference, Sunny Isles, FL, December 3, 2005.

Schafermeyer KW, "Pharmacy Benefit Management Companies" Health Care Systems Course at Southern Illinois University – Edwardsville, September 12, 2005.

Schafermeyer KW, "Should Managed Care Plans Care About Pharmacy Reimbursement?" Academy of Managed Care Pharmacy Chapter at Duquesne University School of Pharmacy, Pittsburgh, PA, September 22, 2004.

Schafermeyer KW, "Transparency of PBMs: What Employer Groups Don't Know About Rx Costs" Faculty and graduate students at Duquesne University School of Pharmacy, Pittsburgh, PA, September 22, 2004.

Stratman R and Schafermeyer KW, "Employment Survey of 2003 Pharmacy Graduates." Poster, Missouri Pharmacy Association Annual Meeting, St. Louis, MO June 19, 2004.

Schafermeyer KW, "Exploring Employment Options in Managed Care Pharmacy." Roundtable discussion at Academy of Managed Care Pharmacy Educational Conference, Montreal, Canada, October 10, 2003.

Schafermeyer KW, "Training Pharmacy Technicians to Assume Managed Care Responsibilities." Poster presentation at the International Pharmacy Federation Annual Congress, Sydney, Australia, September 5, 2003.

Schafermeyer KW, "Paradoxes of the U. S. Health Care System: What are the Real Issues?" Facts and Comparisons, St. Louis, MO, October 4, 2002.

Schafermeyer KW, "Delegation and Technician Training." Illinois Pharmaceutical Association Annual Meeting, St. Louis, MO, September 22, 2002.

Schafermeyer KW, "Using Business Plans to Teach Management Skills." Poster presentation at the International Pharmacy Federation Annual Congress, Nice, France, September 1, 2002.

Schafermeyer KW, "Integration of Managed Care into the Pharmacy Curriculum." Lecture to faculty members of Port Elizabeth University and Rhodes University Colleges of Pharmacy, Port Elizabeth, South Africa, May 31, 2002.

Schafermeyer KW, "The Impact of Managed Health Care on Community and Hospital Pharmacy Practice." Eastern Cape Section of the Pharmaceutical Society of South Africa, Port Elizabeth, South Africa, May 31, 2002.

Schafermeyer KW, "Hospital Contracting With Managed Care Organizations." Ohio State University Seminar, Columbus, OH, January 15, 2002.

Schafermeyer KW, "The Role of Pharmacy and Pharmaceuticals in the Health Care System." Lecture at Washington University, Health Services Administration, St. Louis, MO October 29, 2001.

Panel member, Patient, Physician and Society course at St. Louis University School of Medicine, October 11, 2001.

Schafermeyer KW "Integration of Managed Care in the Pharmacy Curriculum." NABP/AACP Region VI Annual Meeting, Lawrence, KS, October 5, 2001.

Schafermeyer KW, "How Do Countries Differ Regarding Drug Policies?" International Students' Organization, St. Louis College of Pharmacy, September 18, 2001.

Schafermeyer KW, "Self Assessment of Learning in a Graduate Program in Managed Care Pharmacy." International Pharmaceutical Federation Annual Congress, Singapore, September 2, 2001.

Schafermeyer KW, Hurd PH and Rickert DR, "The Portfolio's Role in Changing Graduate Students' Perceived Self Efficacy." Poster, American Association of Colleges of Pharmacy Annual Meeting, Toronto, Canada, July 9, 2001.

Schafermeyer KW, "How to Enhance Your Career as a Pharmacy Technician." Missouri Pharmacists Association Annual Meeting, Osage Beach, MO, June 16, 2001.

Schafermeyer KW, "Development of a Formulary System." Kanartaka State Pharmacy Council, Bangalore, India, May 17, 2001.

Schafermeyer KW, "Evolution of Pharmacy Practice and Education in the United States: From Compounding to Pharmaceutical Care." Al-Ameen College of Pharmacy, Bangalore, India, May 21, 2001.

Schafermeyer KW, "Opportunities in Pharmacy Ownership." National Community Pharmacists Association Chapter at the St. Louis College of Pharmacy, September 7, 2000.

Schafermeyer KW, "How to Effectively Train Pharmacy Technicians." Missouri Pharmacy Association Annual Meeting, Osage Beach, MO, June 10, 2000.

Schafermeyer KW, "Cracking the Code: Understanding Third-Party Plans." National Community Pharmacists Association Annual Meeting, Las Vegas, NV, October 24, 1999.

Schafermeyer KW, "Pharmacy Law and You: Laws That Affect Your Day." National Community Pharmacists Association Annual Meeting, Technician Program, Las Vegas, NV, October 24, 1999.

Moderator for Giambrone A and Gordon DK, "Data Warehousing and Pharmacy: Integrating Information for Improved Decision Making." Academy of Managed Care Pharmacists Annual Meeting, Atlanta, GA, October 9, 1999.

Schafermeyer KW, "How to Effectively Train Your Pharmacy Technicians." Cardinal Health Retail Business Conference, Washington, DC, July 20, 1999.

Schafermeyer KW, "Managed Health Care: A Primer for Pharmacy Technicians." Cardinal Health Retail Business Conference, Washington, DC, July 19, 1999.

Rascati KL, Drugalis JR, Larson LN and Schafermeyer KW, "Pharmacoeconomic Education in Colleges of Pharmacy: A Panel Discussion." American Association of Colleges of Pharmacy Annual Meeting, Boston, MA, July 7, 1999.

Moderator for Bertin RJ and Bond WE, "Credentialing: Documenting Pharmacists' Knowledge and Skills." Academy of Managed Care Pharmacy Annual Meeting, Minneapolis, MN, April 30, 1999.

Schafermeyer KW and Chereson RS, "Be Prepared: Pharmacy Technician Certification Exam Review." National Community Pharmacists Association Annual Meeting, St. Louis, MO, October 17, 1998.

Schafermeyer KW, "Advancing Your Career as a Pharmacy Technician." National Community Pharmacists Association Annual Meeting, St. Louis, MO, October 17, 1998.

Schafermeyer KW, "Ask the Experts: Round Table Discussion for Pharmacy Students." Academy of Managed Care Pharmacy Educational Conference, Chicago, IL, October 9, 1998.

Schafermeyer KW, "Master of Science Courses in Managed Care Pharmacy." Poster, American Association of Colleges of Pharmacy Annual Meeting, Snowmass, CO, July 21, 1998.

Schafermeyer KW, "Round Table Discussion for Pharmacy Students: Graduate Study in Managed Care Pharmacy." Academy of Managed Care Pharmacy Educational Conference, Chicago, IL, October 8, 1998.

Moderator for Sorensen TD, "Expectations of a Managed Care Student Clerkship Rotation." Academy of Managed Care Pharmacy Educational Conference, Chicago, IL, October 8, 1998.

Schafermeyer KW, "Preparing Abstracts and Presentations." Academy of Managed Care Pharmacy Annual Meeting, Philadelphia, PA, May 1, 1998.

Schafermeyer KW, "Training Your Pharmacy Technicians." National Community Pharmacists Association Rx Expo, Pittsburgh, PA, May 8, 1998.

Schafermeyer KW, "Opportunities in Managed Care," NCPA Career Round Tables, NCPA Annual Meeting, Denver, CO, October 26, 1997.

Wagner MA and Schafermeyer KW, "Introduction of the NACDS Technician Competency Exam." National Association of Chain Drug Stores Pharmacy Conference, Boston, MA, August 25, 1997.

Schafermeyer KW, "Role of the Technician in Patient-Focused Care." Wisconsin Pharmacists Association Annual Meeting, Madison, WI, August 16, 1997.

Schafermeyer KW, "Technician Training." Wisconsin Pharmacists Association Annual Meeting, Madison, WI, August 16, 1997.

Hobson EH, Holiday-Goodman MG, Schafermeyer KW and Smith RE, "Taking the Plunge: Introducing Writing in Pharmacy Courses." American Association of Colleges of Pharmacy Annual Meeting, Indianapolis, IN, July 15, 1997.

Schafermeyer KW and Hobson EH, "Business Plans: A Tool to Teach Entrepreneurial and Communication Skills." Poster, American Association of Colleges of Pharmacy Annual Meeting, Indianapolis, IN, July 15, 1997.

Schafermeyer KW, Hurd PD and Motheral BR, "Managed Care Pharmacy: M.S. Degree and Certificate Program." Poster, American Association of Colleges of Pharmacy Annual Meeting, Indianapolis, IN, July 13, 1997.

Dolinsky D, Brushwood D, Desselle S, Mount J, Schafermeyer K and Stratton T, "Social and Administrative Sciences Instructional Modules for the Delivery of Pharmaceutical Care-1997." Poster, American Association of Colleges of Pharmacy Annual Meeting, Indianapolis, IN, July 15, 1997.

Schafermeyer KW, "Writing to Learn Workshop." North Dakota State University Faculty Retreat for Colleges of Pharmacy and Nursing, Fargo, ND January 6, 1997.

Schafermeyer KW and West DS, "Independent Pharmacy Career Roundtable." NARD Annual Meeting, New Orleans, LA, October 13, 1996.

Motheral BR and Schafermeyer KW, "Using Claims Databases for Pharmacoeconomic Analysis and Outcomes Management." Academy of Managed Care Seminar titled "Linkages for Quality: Information Management for Managed Care Pharmacy," Chicago, IL, September 16, 1996.

Schafermeyer KW, "How to Train and Manage Pharmacy Technicians." Georgia Pharmacists' Association Annual Meeting, Savannah, GA, June 18, 1996.

Schafermeyer KW and Motheral B, "Pharmacoeconomics: Basic Principles." SmithKline Beecham Pharmaceuticals Regional Managers Meeting, Memphis, TN, December 4, 1995.

Schafermeyer KW, "Training Your Pharmacy Technician: A Tool for Building a Better Team." NARD Annual Meeting, Las Vegas, NV October 10, 1995.

Chereson RS, Bilger R, Miller B, Schafermeyer KW, "Pharmacy Practitioners' Perceptions of the Pharmaceutics Curriculum." Poster, Annual Meeting of the American Association of Colleges of Pharmacy, Philadelphia, PA, July 1995.

Schafermeyer KW, "The Pharmacy Technician's Role in Enhanced Patient Care." NARD Rx Expo, Dallas, TX, May 6, 1995.

Schafermeyer KW, "Patient Outcomes Measurement and Pharmacoeconomics: Basic Principles." Sixth Annual Charles C. Rabe Symposium, St. Louis, MO, April 25, 1995.

Schafermeyer KW, "Reforming Mental Health Care Prescription Coverage." First Annual Meeting of the Psychopharmacy Pharmacists, St. Louis, MO, November 5, 1994.

Schafermeyer KW, "Health Care Reform: The State Challenge." Illinois Pharmacists Association Annual Meeting, St. Louis, MO, September 30, 1994.

Schafermeyer KW, "Pharmacy Education Reform: Consequence of Health Care Reform." Faculty Retreat of the St. Louis College of Pharmacy, Grafton, IL, August 17, 1994.

Schafermeyer KW, "Using Spreadsheets for Case Studies in Pharmacy Management." American Association of Colleges of Pharmacy Annual Meeting, Section of Social and

Administrative Sciences, session titled "Round Tables on Educational Strategies and Innovations." Albuquerque, NM, July 17, 1994.

Hobson EH and Schafermeyer KW, "Writing and Critical Thinking: Writing to Learn." American Association of Colleges of Pharmacy Annual Meeting, Special Session titled "Classroom Strategies for Developing Critical Thinking." Albuquerque, NM, July 19, 1994.

Schafermeyer KW, Hobson E, Goodwin SA, and Tadrus CS, "Writing-to-Learn in Large Classes: Student and Instructor Benefits." American Association of Colleges of Pharmacy Annual Meeting, Albuquerque, NM, July 19, 1994. Also presented at the Second International Writing Centers Conference, St. Louis, MO, September 28, 1995.

Schafermeyer KW, "Health Care Reform: Implications for Pharmacy." Connecticut Pharmacists Association Annual Meeting, Southbury, CT, June 18, 1994.

Schafermeyer KW, "Seeds of Change: State Initiatives to Health Care Reform." Continuing education program for the St. Louis College of Pharmacy Alumni Association, St. Louis, June 5, 1994.

Schafermeyer KW, "Marketing of Pharmaceuticals to Physicians." Jewish Hospital Therapeutic Conference, St. Louis, MO, June 1, 1994.

Cataldo R and Schafermeyer KW, "Advanced Techniques for Managed Care Pharmacists." Academy of Managed Care Pharmacy post-meeting seminar, Boston, MA, May 10-11, 1994.

Schafermeyer KW, "Value of Prescription Drug Therapy: Costs vs. Quality." Meeting of Nurses' Advanced Practice-Missouri, St. Louis, MO March 14, 1994.

Schafermeyer KW, "Health Care Reform: Implications for Pharmacy Education." St. Louis College of Pharmacy Symposia, October 7, 1993.

Schafermeyer KW, "Health Care Reform: Changing the Face of Pharmacy." St. Louis Pharmacists Association, November 16, 1993.

Schafermeyer KW, "Health Care Reform." St. Louis College of Pharmacy Alumni Association, Columbia, MO, September 8, 1993

Schafermeyer KW, "A Study of the Changes in Medicaid Utilization and Expenditures Associated With an Expanded Drug Formulary." Poster, Annual Meeting of the American Association of Colleges of Pharmacy, San Diego, CA, July 13, 1993.

Bot JA, and Schafermeyer KW, "Perceived Needs of Pharmacy Students and Recent Graduates for Pharmacy Management Proficiency." Poster, American Association of Colleges of Pharmacy Annual Meeting, San Diego, CA, July 13, 1993. Also presented at the Fourth Annual Research/Scholarly Activity Poster Presentation Day, St. Louis College of Pharmacy, April 23, 1993. (Received "Best Poster Award".)

Schafermeyer KW, "How Pharmacists Can Help Protect Your Health." St. Louis Rotary Club, June 3, 1993.

Schafermeyer KW, "Implications of OBRA '90 for Pharmacy Practice." Academy of Students of Pharmacy, St. Louis, September 22, 1992.

Schafermeyer KW, "Perspectives on the PMA-Coordinated Industry Program for Pharmacy Faculty." American Association of Colleges of Pharmacy Annual Meeting, Washington, DC, July 14, 1992.

Becker ES, Coley RM, McKinnon G, GrotPeter P, and Schafermeyer KW, "The Development of a Convocation Series Designed to Enhance Student Professionalism." American Association of Colleges of Pharmacy Annual Meeting, Washington, DC, July 14, 1992.

Schafermeyer KW, "The U.S. Health Care System: Paradox and Alternatives." Current Topics Discussion Group, Chesterfield, MO, May 17, 1992.

Moderator, Third Annual Charles C. Rabe Seminar, St. Louis, MO, April 23, 1992.

Bourikas C, Boyd KL, and Schafermeyer KW, "Factors Influencing Medication Information Requests by Patients." Third Annual Research/Scholarly Activity Poster Presentation Day, St. Louis College of Pharmacy, St. Louis, April 22, 1992.

Schafermeyer KW, and Cataldo R, "An Analysis of the Cost of Dispensing Third-Party and Private-Pay Prescriptions in Rhode Island." Poster, American Pharmaceutical Association Annual Meeting, Section of Economic, Social and Administrative Sciences, San Diego, CA, March 15, 1992.

Schafermeyer KW, "Graduate School Opportunities." Rho Chi luncheon, St. Louis College of Pharmacy, December 6, 1991.

Schafermeyer KW, "Prescription Program Cost Containment: Strategies that Work." Southern Illinois Coal Company Benefits Meeting, Mt. Vernon, IL, May 8, 1991.

Schafermeyer KW, Schondelmeyer SW, Thomas J, and Proctor KA, "Analysis of Chain Pharmacies' Costs of Dispensing a Third Party Prescription." American Association of Colleges of Pharmacy Annual Meeting, Salt Lake City, UT, July 8, 1990. Also presented at the Annual Research/Scholarly Activity Poster Presentation Day, St. Louis College of Pharmacy, April 24, 1991.

Schafermeyer KW, Schondelmeyer SW, Thomas KA, and Proctor KA, "Comparison of Prescription Department Cost Allocation Methods." American Pharmaceutical Association Annual Meeting, Section of Economic, Social and Administrative Sciences, New Orleans, LA, March 10, 1991.

Schafermeyer KW, "The Impact of Managed Health Care on Pharmacy Practice and Education." District VI AACP/NABP Annual Meeting, St. Louis, MO, October 7, 1990. Also presented at the Meeting of the Board of Trustees of the St. Louis College of Pharmacy, October 16, 1990.

Schafermeyer KW, "The Usefulness of the FDA Orange Book as a Guide for Drug Product Selection Decisions." American Society for Pharmacy Law Annual Meeting, Anaheim, CA, April 10, 1989.

Schafermeyer KW, "The Impact of the Medicare Catastrophic Health Care Act on Pharmacy Practice." Indiana Pharmacists Association Midyear Meeting, Indianapolis, IN, April 2, 1989.

Schafermeyer KW, "How to Produce Professional and Profitable Association Publications." National Council of State Pharmaceutical Association Executives Annual Meeting, Chicago, IL, March 27, 1987.

Schafermeyer KW, "Marketing of a Provider-Sponsored Prescription Drug Program." National Association of Retail Druggists' PSAO Conference, Kansas City, MO, May, 1986.

Schafermeyer KW and Gee MA, "Report on State Pharmacy Association-Sponsored Volume Purchasing Programs and Pharmacy Services Administrative Organizations." National Council of State Pharmaceutical Association Executives Annual Meeting, San Francisco, CA, March, 1986.

Schafermeyer KW, "The National and Local Scene on Pharmacy Preferred Provider Organizations and Buying Groups." Missouri Valley Drug Associates Meeting, Kansas City, MO, December, 1985.

Yates WN, Schafermeyer KW and Hovancsak C, "A Study of the Effectiveness of Drug Utilization Review in Improving the Quality of Patient Care." American Pharmaceutical Association Annual Meeting, San Antonio, TX, February 1985.

Schafermeyer KW, Huffman DE, Huffman DC Jr. and Roberts KB, "The Effect of Copayment on Prescription Size under a Prepaid Prescription Program." American Association of Colleges of Pharmacy Annual Meeting, Scottsdale AZ, June 29, 1981.

Schafermeyer KW and White BD, "Consumer Representation on State Boards of Pharmacy: A Survey and Suggestions." American Society for Pharmacy Law Annual Meeting, Anaheim, CA, April 24, 1979.

Schafermeyer KW and Huffman DC, "An Analysis of Select Practitioner Organizations' Positions on the Basic Degree Required for Licensure as a Pharmacist." Joint Commission of Pharmacy Practitioners, Washington, DC, July, 1978.

Global Health Grants

Padidar S, Lukas S and Schafermeyer KW, "Southern African Snakebite Treatment, Education and Prevention Project (Southern African STEP Project)." Submitted to Consortium of Universities for Global Health, October 2020. (\$8,542 – Under Review.)

Lukas S, Teshome B, Berhane H, Schafermeyer KW, Gattas N, Stevens A, Peters GL, Yohannes B and Solomon G, "Optimizing Pharmacists' Impact to Improve Patient Care in Ethiopia." Proposal for STAR Grant sponsored by USAID and Consortium of Universities for Global Health, August 2019. (\$15,000 – not funded)

Schafermeyer KW, Joshi M, Lukas S, Peters GL, Park T, Micek ST, Teshome B, Desai VH and Vaidya R, "Promotion of Antibiotic Stewardship in Goa, India." Proposal for STAR Grant sponsored by USAID and Consortium of Universities for Global Health, August 2019. (\$15,000 – not funded)

Lukas SK and Schafermeyer KW, "Determining the Long-Term Impacts of Pharmacy student Participation in International Service and Learning Opportunities." Sponsored by the Faculty Research Incentive Fund Grant, St. Louis College of Pharmacy. (\$2,555)

Schafermeyer KW and Lukas SK, "Proposal to Increase Pharmacy Student Involvement in Study Abroad Programs." Sponsored by the U.S. Department of State and administered by Partners of the Americas, Washington, DC, August 2016 (\$36,334).

Schafermeyer KW and Griggs SK, "A Study of Missouri Pharmacies' Costs of Dispensing Prescriptions." Missouri Department of Social Services, December 2013. (\$150,500 – subcontract through University of Missouri-Kansas City for \$55,000)

Lee SY, Griggs SK and Schafermeyer KW, "The Assessment of Cultural Competency among Pharmacy Students. Funded by STLCOP Research Incentive Fund, October 2012 (\$10,000). [Renewed in 2013 and 2014 for \$5,000 and \$6,000, respectively.]

Schafermeyer KW and Mallinson K, "Proposal for a Partnership to Support Mid-level Pharmacy Professionals in South Africa by Strengthening the Pharmacy Technician Program at Nelson Mandela Metropolitan University." Sponsored by the U.S. Department of Health and Human Services, Health Resources and Services Administration, administered by the American International Health Alliance, February 2013 (\$80,000) [Renewed for FY 2014-15, \$80,000 plus \$22,499 subgrant; renewed for FY 2015-16, ~ \$80,000 and for FY 2016-17 ~\$80,000]

Schafermeyer KW, "Practice Analysis for Mid-Level Pharmacy Practitioners in South Africa." Research conducted for Nelson Mandela Metropolitan University School of Pharmacy, Port Elizabeth, South Africa. August 2013.

PROFESSIONAL SERVICE ACTIVITIES

Academic

Referee

- *AAPS PharmSci* (1 manuscript)
- *American Journal of Health-System Pharmacists* (7 manuscripts)
- *American Journal of Pharmaceutical Education* (15 manuscripts)
- *The Consultant Pharmacist* (1 manuscript)
- *Clinical Therapeutics* (5 manuscripts)
- *Drug Intelligence and Clinical Pharmacy* (1 manuscript)
- *Journal of the American Pharmaceutical Association* (8 manuscripts)
- *Journal of Managed Care Pharmacy* (21 manuscripts)
- *Journal of Managed Pharmaceutical Care* (1 manuscript)
- *Journal of Pharmaceutical Marketing and Management* (7 manuscripts)
- *Journal of Pharmacy Teaching* (1 manuscript)
- *Journal of Research in Pharmaceutical Economics* (1 manuscript)
- *Pharmacy Education* (the Journal of the International Pharmacy Federation) (5 manuscripts)
- *Research in Social and Administrative Pharmacy* (6 manuscripts)
- Reviewer, "A Manual of Experiential Learning in a Managed Care Pharmacy," Academy of Managed Care Pharmacy, 2000.
- Reviewer, "Accreditation Standards and Learning Objectives for Residency Training in Managed Care Pharmacy," Academy of Managed Care Pharmacy and the American Society of Health-Systems Pharmacy.
- Reviewer, teaching module on Quality Assurance for the *Managed Care & Pharmacy Teaching Tool Project* sponsored by Hoechst Marion-Roussel.

- Member, Editorial Advisory Board, American Association of Pharmaceutical Scientists.
- Abstract reviewer for the Annual Meeting of the American Pharmaceutical Association, Section of Economic, Social and Administrative Sciences, 1994.
- GAPS Review Panel, American Association of Colleges of Pharmacy, 1992.
- Outside Reviewer for West Virginia University Senate Grant for Research or Scholarship, 1999.
- Outside Reviewer for Promotion and Tenure Committees: Drake University, 1999, 2005 and 2010, Virginia Commonwealth University, 2001, Duquesne University, 2001 and 2005, University of Texas, 2006, University of Oklahoma, 2010, University of Arizona, 2013, and Rhodes University, 2016.
- Reviewer, Knowlton C and Penna R, *Pharmaceutical Care, Second Edition* (Washington DC: American Pharmaceutical Association).

Medical College of Virginia School of Pharmacy:

- Appointed as Practitioner/Teacher, 1979-1981.
- Appointed as Clinical Instructor in Pharmacy, 1981-1982.

University of Kansas School of Pharmacy:

- Member, Dean's Advisory Council, 1983-1987.
- Instructor for seven graduate students enrolled in the University of Kansas' Master of Science program in Hospital Pharmacy, 1983-1986.

St. Louis College of Pharmacy:

- Faculty Senate, 2015-2018.
- Faculty Promotion and Tenure Committee, 2015-2018.
- Department Promotion and Tenure Committee, 2018-19.
- International Travel Oversight Committee (chair) 2015-Present .
- Strategic Planning Update Committee, 2016.
- Office of International Programs Strategic Planning Committee (co-chair), 2016-17.
- Academic Planning Committee, 2000.
- Ad hoc Committee on Academic Progression, 1999, 2001-02.
- Ad hoc Committee to Develop a Consulting/Service Organization, 1990.
- Ad hoc Committee to Develop Criteria for the Student Enrichment Award, 1998.
- Ad hoc Committee on Intercultural Issues, 2001-02
- Ad hoc Committee on Mathematics Proficiency (chairman), 2004.
- Administrative Review Committee for Dean of Students, 1996.
- Administrative Review for Vice President of Academic Affairs, 2000.
- Admissions Committee 1993-2000 (Chairman 1993-1995).
- Advisory Committee for B.S. in Pharmaceutical Sciences, 2001.
- Assessment Committee, 1995-1998.
- Assessment Council for Biostatistics Course, 1996.
- Clerkship Review Task Force, 1997.
- Committee on Continuing Education, 1994-1996.
- Committee to Enhance Professionalization, 1991-1992.
- Committee on Research, 1992.
- Curriculum Committee, 1996-2000, 2007-2012 (Chairman 1998-1999).
- Course Review Team for Externships and Clerkships (Chairman) 1997-1998.
- NABPLEX Subcommittee, 1997-1998.
- Guidelines for Elective Designations Subcommittee, 1999.
- Subcommittee on Student Retention Policies, 1994.
- Subcommittee on Patient Outcomes Management/Pharmacoeconomics, 1994-1995.

- Subcommittee on Policies and Procedures
- Practice Management, Population Health and Information Master Domains, (chair) 2010-11.
- Subcommittees on professional program, co-curricular program and elective tracks (2011-12).
- Critical Thinking Steering Committee, Fourth Year Team (Chairman) 1992.
- Dean's Selection Advisory Committee, 1995.
- Executive Committee, 2004 – 2012.
- Faculty Advisor, Delta Sigma Theta Fraternity, 1991-2002.
- Faculty Advisor, National Community Pharmacists Association (formerly NARD) Chapter, 1992-present.
- Faculty Advisor, Lambda Chi Alpha Fraternity, 2006-present.
- Faculty Affairs Committee, 1999-2003; chairman 2001-02.
- Faculty Governance Committee, 2004-2008, 2014-15.
- Faculty Research Incentive Fund, reviewer, 1997.
- FIPSE Grant Advisory Team (Title: "St. Louis College of Pharmacy Peer Education Program"), 1994-1996.
- FIPSE Grant Faculty Member (Title: "A Multi-Institutional Assessment Center Model to Facilitate Expansion of Ability-Based Education in Schools of Pharmacy"), 1993-1996.
- Graduate Studies Committee, 1990-present (Chairman 1996-present).
- Insurance Advisory Committee, 1992.
- Master Plan Technology Subcommittee, 2000.
- Peer Review Team (for various faculty members) 1994-1995.
- Pharmaceutical Care Laboratory Ad Hoc Planning Committee, 1997.
- Pharmacy Technician Training Advisory Committee, (Chairman) 1998-1999.
- "President's Cabinet" (Capital Giving Campaign), 1993.
- Promotion and Tenure Committee (chairman) 2004-2007, department chair, (2014-15), member 2015-2018.
- Search Committee for StLCOP President, 1993-1994.
- Search Committee for a part-time economics professor, (Chairman) 1992.
- Self Study Steering Committee, 2001-02.
- Sociology Course Review, 1992.
- Spirit of Inquiry Ad Hoc Committee, 1990.
- Division Committee to Stimulate Student/Faculty Research and Scholarly Activity, 1991-92.
- Strategic Planning Committee's Enrollment Management Task Force, 1996.
- Strategic Planning Committee, Subcommittee for the External Environment (Chairman) 1992-1993.
- Strategic Planning Writing Committee, 2004
- Strategic Planning Subcommittee on Fundraising, 2005.
- Student Faculty Liaison Committee, 1990-1992.
- Student Status and Advancement Committee, 1991.
- Technology Committee, 2004-2007.
- International Travel Oversight Committee, 2014-15 (Chairman)
- Faculty Senate, 2014-18.
- Department P&T Committee, 2018-Present
- Ad hoc Committee on Developing New Department P&T System, 2019-Present

St. Louis Community College

- Member, Pharmacy Technician Program Advisory Committee

Washington University in St. Louis, School of Medicine

- Member, Advisory Board for Global Health Scholars in Medicine

Associations

Academy of Managed Care Pharmacy:

- Contributing Editor for *Journal of Managed Care Pharmacy*, 1995-1998.
- Member, Editorial Advisory Board, 1995-1998.
- Member, Schools of Pharmacy Relations Committee, 1997-1998.
- Member, Special Projects Committee, 1998-2000 (Chairman, 1999-2000).
- Member, Educational Affairs Committee, 2001-2004 (Chairman 2003-2004).
- Member, Nominating Committee, 2004.
- Member, Fellow Selection Committee, 2004.
- Diplomat, St. Louis College of Pharmacy.

American Association of Colleges of Pharmacy:

- Chair, Social and Administrative Sciences Section, 2005-06
- Chair-Elect, Social and Administrative Sciences Section, 2004-05
- Graduate Research Liaison for the St. Louis College of Pharmacy, 1999-2001.
- Member, Ad Hoc Committee on Mentoring, Section of Teachers of Pharmacy Administration, 2000-2001.
- Member, Curriculum Development Committee, Section of Teachers of Pharmacy Administration, 1993-1996.
- Member, Health Organization and Government Affairs Committee, 1997-1998.
- Alternate Delegate, Council of Faculties, 1996, 1999.
- Member, Web Resources Committee, 1999-2000

American College of Apothecaries:

- Member, Third Party Committee, 1979-1987.

American Pharmaceutical Association

- Books and Electronic Products Editorial Advisory Board, 2003-06.

American Society of Association Executives:

- Chairman, Certified Association Executives' Exam Study Committee for Kansas, 1983.

Indiana Pharmacists Association:

- Member, Association Affairs Committee, 1989.
- Representative to Indiana Department of Public Welfare's Medicaid Pharmacy Reimbursement Task Force, 1989.

Iowa and Wisconsin Pharmacists Associations:

- Member, Pharmacy Technician Certification Review Series Advisory Committee

Kansas Society of Association Executives:

- Member, Board of Directors, 1987.
- Member, Annual Meeting Committee, 1986.
- Chairman, Strategic Planning Committee, 1985.

Missouri Pharmacy Association:

- Member, Nominating Committee, 2016-17.
- Member, Convention Planning Committee, 2004-2006, 2010-11.
- Chairman, Bylaws Committee, 1994-98, member 1992-1994.
- Member of MPA Council (Board of Directors), 1975-1976.

- Member of MPA Education Committee, 2007-2009, 2012.
- Reviewer, Student Business Plan Competition, 2014.
- Member, Development Workgroup for Missouri Care Network

National Community Pharmacists Association (formerly National Association of Retail Druggists):

- Member, Consumer Affairs and Public Relations Committee, 1987.
- Member, Third Party Steering Committee, 1986.
- Member, Third Party Committee, 1985.
- Faculty Advisor, 1992-present.

National Council of State Pharmaceutical Association Executives:

- Chairman, Program Committee, 1987.
- Member, Board of Directors, 1986 and 1987.
- Member, Program Committee, 1986.
- Member, Third Party Task Force, 1985 and 1986.

St. Louis College of Pharmacy Alumni Association:

- Member, Board of Directors 2009 - 2017
- Member, Budget and Financial Development Committee, 1991-1994, 2004-05, 2009-10.
- Member, Bylaws Revision Committee, 1992.
- Member, Fund for Excellence Committee, 1993-1994.
- Member, Mortar and Pestle Society Advisory Committee, 1998.
- Member, Student Affairs Committee, 1994-2000.
- Co-chairman, Community Service Committee
- Class Representative for Class of 1976 Reunion.
- Member, Nominations Committee, 2000-2002, 2015-16.
- Member, Governance Committee, 2013-2017.
- Member, Community Affairs Committee, 2012-2015.

St. Louis Pharmacists' Association

- Chairman of the Board, 2004
- President, 2003
- Secretary, 2001-02.
- Member, Board of Directors, 1996-2000.
- Co-chairman, Charles C. Rabe Scholarship Committee, 1997.

State Pharmaceutical Editorial Association:

- Vice-President, 1982.

Student American Pharmaceutical Association:

- Chapter President, St. Louis College of Pharmacy, 1975-1976.
- Region VI Coordinator, 1975.

Virginia Society of Association Executives:

- Member, Strategic Planning Committee, 1982.

Consultation

- Xcenda/Genentech Advisory Board, "Cost Effectiveness of Breast Cancer Treatments," 2012-2013.
- Director of Education, Institute for the Certification of Pharmacy Technicians, 2005-2010.
- Board of Advisors, PharmAccount, Inc., 2004-2009.

- Consultant for Third Party Solutions, Inc. in Minnesota workers' compensation prescription reimbursement appeal.
- Senior Fellow for Institute for the Advancement of Community Pharmacy, "Optimizing Community Pharmacy Effectiveness," 2001-02.
- National Association of Chain Drug Stores, 2000. (Scope of Consultation: update test bank for the Community Retail Pharmacy Technician Exam and revise the third edition of the *Community Retail Pharmacy Technician Training Manual*.)
- Academy of Managed Care Pharmacy. Served as featured expert for the "Ask Your Colleague" page on the AMCP web site. Topic: Provider Profiling. May 16-31, 2000.
- Academy of Managed Care Pharmacy, 1998. (Scope of consultation: development of a background paper on certification for managed care pharmacists).
- National Association of Chain Drug Stores, 1997-2000. (Scope of consultation: preparation and analysis of multiple versions of the Community Pharmacy Technician Examination).
- Iowa Pharmacists Association and Wisconsin Pharmacists Association, 1997-1998. (Scope of consultation: reviewed pharmacy technician training manual and videotape program.)
- University of Colorado College of Pharmacy, 1996. (Scope of Consultation: cost of dispensing study for Colorado Medicaid program.)
- National Association of Chain Drug Stores, 1996. (Scope of consultation: Analysis of chain pharmacy manpower needs.)
- SmithKline Beecham Pharmaceuticals, 1995. (Scope of consultation: Conference on pharmacoeconomics and outcomes management.)
- National Association of Chain Drug Stores, 1995. (Scope of consultation: Analysis of chain pharmacies' costs of dispensing.)
- Proctor and Gamble Pharmaceuticals, 1994-1995. (Scope of consultation: Managed care reimbursement for controlled-release products.)
- Calgon Vestal Laboratories, 1994. (Scope of consultation: Marketing to managed care organizations and application of pharmacoeconomic principals to marketing efforts.)
- National Association of Chain Drug Stores, 1994. (Scope of Consultation: External reviewer for "Community Retail Pharmacy Technician Training Manual".)
- Catholic Materials Management Alliance, 1994. (Scope of Consultation: Analysis of "Pharmacy Services Survey" for 125 Catholic hospitals in the U.S.)
- General American Life Insurance Company, 1994. (Scope of consultation: pricing of injectable drugs for Medicare Part B claims.)
- International Medication Systems, Ltd., 1994. (Scope of consultation: Pharmacoeconomic Analysis of Parenteral Drug Delivery Systems.)
- Express Scripts, Inc., 1991-1993. (Scope of consultation: prescription utilization analysis, formulary management and drug utilization review.)

- Missouri Department of Administration, Division of Purchasing, 1992. (Scope of consultation: member of evaluation team reviewing proposals to conduct a therapeutically oriented drug use review program for the Missouri Medicaid prescription program.) (RFP B300627)
- Southern Illinois Coal Company Benefits Committee, 1991. (Scope of consultation: cost containment of drug benefit program and improvement of utilization and patient compliance.)
- Missouri Department of Family Services, Division of Medical Services, Medicaid Prior Authorization Task Force, Chairman, 1991. (Scope of consultation: formulary recommendations for exclusion and prior authorization of drugs in the Missouri Medicaid program.)
- Illinois Pharmaceutical Association, 1991. (Scope of consultation: reviewed and commented on a draft of an Employee Pharmacist Manual.)
- Rhode Island Pharmaceutical Association, 1990-1991. (Scope of consultation: conducted a study of pharmacies' costs of dispensing third party prescriptions and provided individual pharmacy analyses on request.)
- Pharmacy Network of Indiana, 1989-1990. (Scope of consultation: prepared a response to a request for proposal from Blue Cross/Blue Shield of Indiana for the establishment, operation and management of a pharmacy preferred provider program.)
- Indiana Department of Public Welfare, Medicaid Pharmacy Reimbursement Task Force Member, 1989. (Scope of consultation: analysis of cost savings from formulary decisions and other cost containment measures; recommendation of cost containment strategies.)
- Georgia Pharmaceutical Association, 1987. (Scope of consultation: development of a nonprofit Research and Education Foundation.)
- Kansas Optometric Association, 1985. (Scope of consultation: evaluation of association structure, programs and activities according to guidelines recommended by the American Society of Association Executives.)
- Virginia General Contractors' Association, 1981. (Scope of consultation: evaluation of association structure, programs and activities according to guidelines recommended by the American Society of Association Executives.)
- Virginia Coalition for Prevention of Venereal Disease, Board of Directors, 1979-1981.

Testimony Given at Trial or Deposition (in last five years)

- *Humana Health Plan, Inc.: Humana Insurance Company; and Humana Pharmacy Solutions, Inc. v. Walgreens Co., 2022*
- *Humana Health Plan, Inc.: Humana Insurance Company; and Humana Pharmacy Solutions, Inc. v. Rite Aid HDQTRS Corp. and Rite Aid Corp, 2021*
- *Humana Health Plan, Inc.: Humana Insurance Company; and Humana Pharmacy Solutions, Inc. v. CVS and CVS Health Corporation, 2021*
- Confidential arbitration on behalf of Maine Community Health Options v. a PBM, 2021
- Confidential arbitration on behalf of Kentucky Health Cooperative , Inc. v. a PBM, 2021
- *Christopher Corcoran, et al. v. CVS Pharmacy, Inc., 2021*
- *United States ex rel. Penelow, et al. v. Janssen Products, LP, 2020*
- *United States ex rel. Proctor v. Safeway Inc., 2018*

- *United States ex rel. Schutte v. SuperValu Inc., et al.*, 2018
- *HM Compounding Services, LLC et al. v. Express Scripts, Inc.*, 2018

TEACHING RESPONSIBILITIES

Undergraduate:

- Advanced Pharmacy Practice Experience (APPE) Rotations, 2010-present
- WE 3570 – Personal Financial Management for the Healthcare Professional; fall, 2005-07.
- PSEL 4100 / WE 3735 – International Service Learning 2011-12 (Costa Rica), 2012-13 (Guatemala), 2013 (Poland), 2013-14 (Guatemala), 2014 (Romania), 2015 (Macedonia), 2016 (Guatemala), 2017 (Guatemala and Portugal), 2018 (Guatemala and Romania).
- Special Projects – Leadership in International Service 2015-present
- SP 4720 – Special Projects: Pharmacy Business Planning, fall, 2005.
- PA 5120 – Health Systems Management: Economic Aspects, spring and fall 2005-present.
- UMKC Course – The Economics of Health and Medicine (Live Distance Learning), fall 2004.
- PA 4102 and PA 3002 - Pharmacy Management, spring 1991-2002, Fall 2000-03.
- WE 4770 - Introduction to Pharmacy Entrepreneurship, fall 1996-2000, 2012.
- SS 2111 and SS 2511 - Economics, fall 1990-1995, 2003, fall and spring 2004-2010.
- SS 2111 (Barnes College of Nursing) - Economics, spring 1992 and fall 1993.
- PA 2112 - Health Care Systems, spring 1991-1993.
- PA 5701 - Special Projects (Intro. to Community Pharmacy Ownership), fall 1991.
- ST 5700 - Selected Topics - Community Pharmacy Ownership, fall 1993-1994.
- Research Method Methods – Pharm. D., guest lectures, spring 1991.
- SS 1100 - Freshman Seminar, guest lectures, fall 1993.
- TH 5002 - Therapeutics IV, guest lecturer on managed care, spring 1997.
- Clinical Seminar Course, guest lecturer, spring 2006, 2007.
- Preceptor, Administrative Rotation, STLCOP Experiential Program, 2007.

Graduate:

- PA 6190 - Managed Care Pharmacy, Trimester II (Jan-Mar) 1998, 2000, 2002, 2004, 2006.
- PA 6180 - Managed Health Care, Trimester III (Apr-June) 1997, 1999, 2001, 2004, 2006, Trimester II, 2005.
- PA 6770 - Financial Management, Trimester I (Sep-Nov) 1996, 1998, 1999, 2001, 2003, 2005, 2007.
- PA 6802 - Pharmacy Marketing, Trimester II (Jan-Mar) 1991 and 1995, Trimester I (Sep-Nov) 1992.
- PA 6517 - General Research Methods (assisted), Trimester I (Sep-Nov) 1990, Trimester III (Apr-June) 1993 and 1994.
- PA 6722 - Health Care and Public Policy, Trimester I (Sep-Nov) 1991, 1993, 1995. Trimester II (Jan-Mar) 1997, 1999, 2001, 2003, 2005.
- PA 6101 - Management of Human Resources, Trimester II (Jan-Mar) 1992.
- PA 6160 - Pharmacy Policy and Planning, Trimester III (Apr-June) 1994 and 1995.

PUBLIC SERVICE

- Better Healthcare for Africa (supporting Medical Missions at St. Albert's Mission Hospital in Zimbabwe)
 - Member, Board of Directors (2010 – present)
- Walbridge Settlement Foundation (supporting a medical clinic in Kyekyewere, Ghana)
 - Secretary, Board of Directors (2008- 2016)
- Leukemia and Lymphoma Society
 - Member, Patient Services Committee, 2001-2006
 - Sponsor, Light the Night Walk, 2002-2009
 - Participant, First Connection Program 2001 – 2006 (Chairman, 2003-05)
- Habitat for Humanity – St. Louis, local volunteer, 2001 - present
- Habitat for Humanity International, Global Village Missions (2001 – present)

- Bangalore, India 2001
- Durban, South Africa 2002 (Crew Leader)
- Asuncion, Paraguay 2003
- Gangwon-do, South Korea 2003
- Ulan Bator, Mongolia 2003
- Nicoya, Costa Rica 2004 (Team Leader)
- Belize City, Belize 2004
- Cartago, Costa Rica 2005 (Team Leader)
- Barahona, Dominican Republic 2005
- Temuco, Chile, 2006
- Kumasi, Ghana, 2007 (Team Leader)
- Cochabamba, Bolivia 2008
- Gaborone, Botswana 2009 (Co-leader)
- My Tho, Vietnam 2011 (Co-leader)
- Leogane, Haiti 2011
- La Cruz, Costa Rica, 2012 (Team Leader)
- Beius, Romania, 2012
- Jutiapa, Guatemala, 2013 (Team Leader)
- Katowice, Poland, 2013 (Team Leader)
- Tecpan, Guatemala, 2014 (Team Leader)
- Raduati, Romania, 2014 (Team Leader)
- Veles, Macedonia, 2015 (Team Leader)
- Cape Town, South Africa, 2015
- Retalhuleu, Guatemala, 2016 (Team Leader)
- San Lucas Toliman, Guatemala, 2017 (Team Leader)
- Braga, Portugal, 2017 (Team Leader)
- Quetzaltenago, Guatemala, 2018 (Team Coordinator)
- Constanta, Romania, 2018 (Team Leader)
- El Progresso, Guatemala, 2019 (Team Coordinator)
- Gliwice, Poland, 2019 (Team Coordinator)
- Zacapa, Guatemala, 2020 (Team Coordinator)
- Medical Missions
 - Brace for Impact 46 and Pittsburg Kids Foundation, CHIDA Hospital and Clinic, Cap Haitien, Haiti, August, 2018.
 - Pittsburg Kids Foundation, Health needs assessment, CHIDA Hospital and Clinic, Cap Haitien, Haiti, October, 2015.
 - Raleigh Fitkin Memorial Hospital, Manzini, Swaziland, 2012, 2013.
 - Friends in Village Development, Bangladesh, Sylhet, Bangladesh, 2014.
- American International Health Alliance (supporting capacity building efforts of Nelson Mandela Metropolitan University School of Pharmacy, Port Elizabeth, South Africa) 2013 - present.

HONORS AND AWARDS

- Professor Emeritus, University of Health Sciences and Pharmacy, June 2022.
- Distinguished Service Award, Mortar and Pestle Society of the University of Health Sciences and Pharmacy, June 2022.
- Distinguished Alumnus, STLCOP Alumni Association, November 10, 2017.
- Bowl of Hygeia Award (from the American Pharmacists Association, APhA Foundation, National Association of State Pharmacy Associations, and the Missouri Pharmacy Association) June 2013
- Outstanding Educator Award – Teacher of the Year, St. Louis College of Pharmacy, 2012.
- Emerson Excellence in Teaching Award, 2012.
- STLCOP Alumni Association Community Service Award, September, 2011
- STLCOP Faculty Member of the Year Award, Missouri Pharmacy Association, June, 2009

- Faculty Advisor of the Year, St. Louis College of Pharmacy, May, 2009.
- Fellow of the American Pharmacists Association, March, 2008.
- Student Enrichment Award, St. Louis College of Pharmacy, 2006.
- Fellow of the Academy of Managed Care Pharmacy, March, 2003.
- Senior Fellow, Institute for the Advancement of Community Pharmacy, July 1, 2002 to June 30, 2003.
- Missouri Pharmacy Association "Making a Difference Award," June 15, 2002.
- Honorary Member, Phi Lambda Sigma Pharmacy Leadership Society, February, 2001.
- Outstanding Achievement Award, St. Louis College of Pharmacy Alumni Association, October, 2000.
- Life Membership, Mortar and Pestle Society, St. Louis College of Pharmacy, 1999.
- Faculty Award for Excellence in Pharmacy Administration, National Community Pharmacists Association Foundation, 1998.
- Faculty Mentor Award, NACDS Education Foundation Community Pharmacy Essay Contest, May 1998. (For mentoring student Paul M Husemann with his second-place essay "Paving the Way to Pharmaceutical Care: A Chain-Sponsored Education Program.")
- Outstanding Educator of the Year, St. Louis College of Pharmacy, 1996.
- Emerson Electric Excellence in Teaching Award, November 17, 1996.
- NCPA Chapter of the Year Award, 1996 and 1997; Chapter of the Year Runner-Up, 1995, 1998, 1999 (Faculty Advisor).
- Missouri Pharmacy Association President's Award, June, 1995.
- New Investigator Grant, American Association of Colleges of Pharmacy, 1991.
- Jenkins/Knevel Award for Excellence in Research, 1990, Purdue University, finalist.
- Pfizer-AFPE Pharmacy Administration/Pharmaceutical Marketing Fellow, 1989/1990.
- First place, National Association of Boards of Pharmacy Foundation Scholarship Competition, January, 1989.
- Member, Rho Chi National Pharmaceutical Honor Society.
- Honorary Life Membership, Kansas Pharmacists Association, December, 1987. (Only the second person to have been awarded this honor.)
- First prize, Sandoz Tenth Annual Medical Journalism Competition, 1985.
- McKesson & Robbins Leadership Award, May, 1976.

7/22

EXHIBIT B

EXHIBIT B:
MATERIALS RELIED IN EXPERT REPORT
OF KENNETH W. SCHAFERMEYER, Ph.D.

Production Documents
CAREMARK_FORTH-000193
CAREMARK_FORTH-001807
CAREMARK_FORTH-001969
CAREMARK_FORTH-002519
CAREMARK_FORTH-002869
CAREMARK_FORTH-003045
CAST000530
DSS0021-0050
DSS0196-0205
ESI-0000127
ESI-0000323
ESI-0000917
ESI-0001178
IBEW_0020292
IBEW_0020385
IBEW_0020799
IBEW_0020904
LOCAL439 0002146
MEDTRAK - 000028
MI-F_00000772
MI-F_00000953
MI-F_00001156
MI-F_00001250
MI-F_00001426
MI-F_00001883
MI-F_00002160
NCPDP / Forth v Walgreens 000001
NCPDP / Forth v Walgreens 000340
ORx_Worth_000178
ORx_Worth_000399
ORx_Worth_000482
ORx_Worth_001060

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OF KENNETH W. SCHAFERMEYER, Ph.D.

Production Documents
ORx_Worth_001430
ORx_Worth_001910
ORx_Worth_002609
ORx_Worth_003061
ORx_Worth_003379
ORx_Worth_003697
Walg_Forth_00169301
Walg_Forth_00321351

Deposition Transcripts
Aug. 21, 2019 Deposition of Erica Reaves
Dec. 19, 2019 Deposition of David E. Halter, Jr.
Dec. 20, 2019 Deposition of Megan Mistarz
Dec. 5, 2019 Deposition of Megan Butterfield
Jan. 17, 2020 Deposition of Christine Ewing
Jan. 21, 2020 Deposition of Cindy Ip
July 14, 2020 Deposition of James Devine
July 16, 2020 Deposition of Mitch Kempker
June 15, 2020 Deposition of David Schroff
Nov. 20, 2019 Deposition of Michael Amiet
Oct. 2, 2019 Deposition of Cade Erlund
Oct. 5, 2018 Deposition of Chris Dymon
Sept. 14, 2019 Deposition of Jay Bernstein
Jan. 17, 2020 Deposition of Scott Schuler
Sept. 17, 2020 Deposition of Brian Correia
Sept. 30, 2020 Deposition of Christy Piti

Deposition Exhibits
Amiet Deposition Exhibit 73
Amiet Deposition Exhibit 75
Amiet Deposition Exhibit 79
Amiet Deposition Exhibit 80
Amiet Deposition Exhibit 81

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OF KENNETH W. SCHAFERMEYER, Ph.D.

Deposition Exhibits
Amiet Deposition Exhibit 82
Amiet Deposition Exhibit 83
Amiet Deposition Exhibit 87
Bailey Deposition Exhibit 109
Bailey Deposition Exhibit 110
Barnes Deposition Exhibit 326
Barnes Deposition Exhibit 339
Bernstein Deposition Exhibit 35
Bernstein Deposition Exhibit 43
Bernstein Deposition Exhibit 44
Bernstein Deposition Exhibit 46
Bernstein Deposition Exhibit 55
Catalano Deposition Exhibit 82
Catalano Deposition Exhibit 89
Catalano Deposition Exhibit 90
Correia Deposition Exhibit 355
Erlund Deposition Exhibit 63
Erlund Deposition Exhibit 64
Erlund Deposition Exhibit 65
Erlund Deposition Exhibit 69
Ewing Deposition Exhibit 234
Ewing Deposition Exhibit 236
Ewing Deposition Exhibit 238
Fox Deposition Exhibit 69
Fox Deposition Exhibit 75
Halter Deposition Exhibit 123
Halter Deposition Exhibit 124
Johnson Deposition Exhibit 376
Kempker Deposition Exhibit 310
Kempker Deposition Exhibit 314
Kempker Deposition Exhibit 315
Mistarz Deposition Exhibit 145

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MATERIALS RELIED IN EXPERT REPORT
OF KENNETH W. SCHAFERMEYER, Ph.D.

Deposition Exhibits
Piti Deposition Exhibit 371
Piti Deposition Exhibit 372
Schroff Deposition Exhibit 270
Schroff Deposition Exhibit 279
Schuler Deposition Exhibit 169
Schuler Deposition Exhibit 174
Schuler Deposition Exhibit 181
Schuler Deposition Exhibit 185

Manuals
Centers for Medicare & Medicaid Services (CMS), “Adopted Standards and Operating Rules,” https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/HIPAA-ACA/AdoptedStandardsandOperatingRules.html
Colorado Medical Assistance Program, Pharmacy Billing Manual (rev. Oct. 2013)
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EXHIBIT B:
MATERIALS RELIED IN EXPERT REPORT
OF KENNETH W. SCHAFERMEYER, Ph.D.

Pleadings
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<i>In re Mississippi Medicaid Usual & Customary Litig.</i> , No. 17Cl1:17-cv-00028-CW, ECF 205-3 (Cir. Ct. Desoto Cnty. May 3, 2021), Exhibit 3
<i>In re Mississippi Medicaid Usual & Customary Litig.</i> , No. 17Cl1:17-cv-00028-CW, ECF 217-2 (Cir. Ct. Desoto Cnty. May 17, 2021), Exhibit 2
Walgreens' First Amended Objections and Responses to Plaintiffs' Fourth Set of Interrogatories (Nov. 20, 2020)
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